DOCUMENT RESUME

ED 455 267 TM 033 070

TITLE	Delaware Student Testing Program: A Score Results Guide for Teachers.
INSTITUTION	Delaware State Dept. of Education, Dover. Assessment and Accountability Branch.
PUB DATE	2000-00-00
NOTE	119p.; For the guide for boards and administrators, see TM 033 069; for the guide for parents, see TM 044 071.
AVAILABLE FROM	Bureau of Archives and Records, Hall of Records, P.O. Box 1401, Dover, DE 19903 (document no. 95-01/00/06/06, microfiche). For full text: http://ww.doe.state.de.us.
PUB TYPE	Guides - Non-Classroom (055)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Elementary Secondary Education; *Scores; State Programs; *Teachers; Test Construction; Test Interpretation; *Test Results; Testing Programs
IDENTIFIERS	*Delaware Student Testing Program

ABSTRACT

This guide contains materials to help teachers understand and use the reports from the Delaware Student Testing Program (DSTP). In spring 1998, the Department of Education, in conjunction with Harcourt Educational Measurement, began its annual administration of the DSTP reading, writing, and mathematics tests for students in grades 3, 5, 8, and 10 to provide an accurate measure of how students are doing relative to Delaware's rigorous content standards. In spring 2000 the science and social studies tests were administered in grades 8 and 11, and a version of these tests designed for grades 4 and 6 were administered in fall 2000. This guide contains the following sections: (1) "Introduction to the DSTP"; (2) "Understanding the English Language Arts Report"; (3) "Understanding the Mathematics Report"; and (4) "Understanding the Science and Social Studies Report." For each subject area, information is provided about individual, school summary, and district summary reports, and norms, score comparisons, and the instructional needs identified by the reports. Ideas are provided for using the identified instructional needs and test performance analyses at the appropriate grades. One appendix contains sample reports from Harcourt Educational Measurement. A second appendix contains samples of items for each part of the DSTP, and the third appendix contains sample district reports. (SLD)

TM

Delaware Student Testing Program

A SCORE RESULTS GUIDE FOR TEACHERS

Prepared by the Assessment and Analysis Group
Assessment and Accountability Branch

Delaware Department of Education
Spring 2000

Available on the Department of Education Website at

www.doe.state.de.us

STATE OF DELAWARE

The Honorable Thomas R. Carper
Governor

The Honorable Ruth Ann Minner
Lieutenant Governor

Valerie A. Woodruff
Secretary of Education

STATE BOARD OF EDUCATION

James L. Spartz, Ed.D., President, Camden
Jean W. Allen, Vice President, Seaford
Mary B Graham, Esq., Wilmington
John W. Jardine, Jr., Dover
Joseph A. Pika, Ph.D., Newark
Dennis J. Savage, Wilmington
Claibourne D. Smith, Ph.D., Hockessin

This publication is available in microfiche from the Bureau of Archives and Records, Hall of Records, P.O. Box 1401, Dover, Delaware 19903.
Document No. 95-01/00/06/06

TABLE OF CONTENTS

SECTION I: INTRODUCTION TO THE DSTP

Delaware students must meet world class standards if they are to be competitive and successful in a global economy. To prepare our students for their future, our schools must support rigorous standards and each of our teachers must set high expectations. Our students must also commit themselves to the achievement of excellence.

Any system that hopes to accomplish such ambitious goals must have a yardstick by which to measure its progress. For the past several years Delaware educators have been developing the Delaware Student Testing Program (DSTP), which now will serve as such a yardstick. The tests are tied to the Delaware content standards that define the knowledge and skills required for our students to succeed beyond high school. The results of the DSTP provide us with an understanding of how well we are preparing students to meet the many challenges that lie ahead. Whatever the results, Delaware students and educators will understand where we are so that we can tell how far we have to go. An honest assessment of where we are is the first step towards getting where we want to be.

In the Spring of 1998, the Department of Education, along with Harcourt Educational Measurement, began its annual administration of the DSTP Reading, Writing, and Mathematics tests to students in grades 3, 5, 8, and 10, to provide us with an accurate measure of how well our students are doing relative to Delaware's rigorous content standards. In the spring of 2000, Science and Social Studies tests were administered in grades 8 and 11. Science and Social Studies tests will be administered in grades 4 and 6 in the fall, 2000.

Purpose of the Test

The Delaware Student Testing Program is designed to:

- serve as a measure of progress toward the Delaware standards;
- ensure that students can apply their academic skills to realistic, everyday problems;
- promote better instruction and curriculum by providing timely reports of students' strengths and weaknesses;
- ensure that students are formally provided with extra instruction when needed;
- serve as a primary indicator in the statewide accountability system;
- help districts deal with the issue of who should and should not be promoted from grade to grade.

Questions and Answers About the 1999 DSTP

What are "Standards"?

The standards are the result of several years of work by Delaware educators to determine what Delaware students should know and be able to do as a result of their education. The standards for English language arts (reading and writing), mathematics, science, and social studies were approved by the State Board of Education in 1995. Since then, Delaware's standards have been widely recognized as among the best in the nation by publications such as *Time, Forbes*, and *Education Week*. Each teacher and each administrator in Delaware has a copy of the Standards.

What kind of information is tested in each part of DSTP?

Reading: Many aspects of reading are assessed using literary, technical, and informational passages. Students are asked to read passages and then demonstrate their ability to analyze and interpret what they have read by answering multiple-choice, short answer, and extended response questions. Because reading is fundamental to success in all areas of education, the reading test is especially important. **The results of the spring 2000 Reading test in grades 3, 5, and 8 will determine whether or not students will be required to have an Individual Improvement Plan (IIP) for the 2000-2001 school year .**

Writing: In this section of the test, writing is assessed in two ways. First, students are asked to provide a written response to a prompt (question or statement). Second, students are asked to write a short response to a question about a reading passage. This is done so students recognize that reading and writing are integrally connected.

Mathematics: The mathematics section assesses a student's ability to grasp key concepts and solve realistic problems. Multiple choice, short answer, and extended response questions are used to assess students' conceptual knowledge, procedural

knowledge, and knowledge of mathematical processes across core areas such as computation, measurement, algebra, and geometry. Because the test is focused on reasoning and analysis, students are permitted to use calculators on some parts of the test. **The results of the spring 2000 mathematics test at grades 8 will determine whether or not a student will be required to have an Individual Improvement Plan (IIP) for the 2000-2001 school year.**

Science: The science section assesses a student's ability to grasp key scientific principles and solve realistic problems. Multiple choice questions and short answer questions are used to assess students' conceptual knowledge, procedural knowledge, and knowledge of scientific principles across core areas such as ecology, diversity of living things, life processes, dynamic systems, space, energy, properties of materials, and the nature and application of science and technology. The test is focused on reasoning and analysis.

Social Studies: The social studies section assesses a student's ability to grasp key concepts and apply this knowledge to everyday living within a diverse world, and within a democratic system. Multiple choice questions and short answer questions are used to assess students' conceptual knowledge and analytical abilities across the core areas of civics, economics, geography, and history. The test is focused on reasoning and analysis across core areas.

What type of questions are found on the DSTP?

Students will encounter the following types of questions on the DSTP:

- Multiple-choice items (scored at one point each).
- Short answer items (scored on a 0-1-2 scale, using item-specific rubrics).
- Extended response items (scored on a 0-1-2-3-4 scale, using item-specific rubrics).
- Text-based writing items (extended response items that are scored for both reading and writing). These items are scored on a 0-1-2-3-4-5 scale, using item specific rubrics.

Samplers of items and their answers or accompanying rubrics can be found on the DOE website at www.doe.state.de.us. Click on **DSTP**, then click on **Sample Items**. These items can be downloaded and used as practice items in the classroom. Similar items from the NAEP (National Assessment of Educational Progress), the DelaWISE Delaware Comprehensive Assessment Program (Science), and the NAGB (National Assessment Governing Board) can also be accessed through the DOE website and downloaded for use in the classroom.

What are scaled scores and what is the advantage of using them?

A student's number of correct responses to test items is called a raw score. On the DSTP the reading and mathematics raw scores are converted to scaled scores by use of the Item Response Theory, Rasch Model process. This is a widely accepted scaling

procedure used by testing companies. The primary purpose of converting raw scores to scaled scores is to aid in interpreting students' test results. The scaled scores on the DSTP permit comparison of the scores of a student over time from grade 3 to grade 5 to grade 8 to grade 10. This permits an examination of the student's growth over time. Scaling also permits the examination of other trends in performance of **groups of students** over time.

What are the scores and how are they going to be used?

There are four types of scores that are reported via written reports. These types are:

1. Individual student scores;
2. School scores;
3. District scores; and
4. Statewide scores.

There are five types of reports available from the DSTP-OR intranet system (four types provide information like those written reports listed above and a fifth is a special group report). Teachers who have approval from their principals, can have access to the intranet. Each type of report is discussed below:

Individual student scores:

These results are reported to parents and to schools so the indicators of the student's academic strengths and weaknesses can be seen. In turn, both parents and teachers can begin to assist the student in meeting the rigorous content standards.

The main indicator of student progress is reported as the student performance level. The performance levels were developed after the spring 1999 DSTP test was administered. The results of this test were used to develop decision points for performance levels (see pages 13 and 14 for the development of the reading and writing decision points, and pages 28 and 29 for mathematics decision points.) A student receiving a score Well Below the Standard or Below the Standard in reading at grades 3, 5, and 8, and math at grade 8, will be required to have an Individual Improvement Plan (IIP) developed for the 2000-2001 school year. These plans will contain individual instructional needs in reading and in mathematics and what instructional interventions will be provided by the schools. Teachers, administrators, and parents will participate in the development of the IIP.

School scores:

The results of student performance on the DSTP for the entire school can assist the principal in evaluating how the curriculum is functioning: What are the strengths of the curriculum? What are the weaknesses? What overall curriculum changes might be necessary to assist students in meeting the standards? The school scores can provide a signal to the principal that additional resources may be needed or reallocated to assist teachers in providing the necessary instruction.

District scores:

The results of district-wide student performance on the DSTP allow the superintendent to identify strengths and weaknesses common to the schools in the district. This information permits the superintendent to examine district-wide curriculum that works, curriculum that needs adjustment, resource allocation, and/or any other adjustment that might be necessary.

Statewide scores:

The results of the statewide scores permit the Department of Education and legislators in Delaware to monitor the collective progress of students toward meeting the Delaware content standards. It is anticipated that the statewide scores on the DSTP will increase for students as teachers and school administrators begin to identify strengths and weaknesses and to continue to work for changes to improve the educational process.

Reports

Written DSTP reports are distributed to parents and education administrators. Examples of these reports are found in Appendix A.

Reports sent to parents

Principals and parents of students in grades 3, 5, 8, and 10 receive two reports:

1. The 2000 DELAWARE STUDENT TESTING PROGRAM English Language Arts Individual Report,
2. The 2000 DELAWARE STUDENT TESTING PROGRAM Mathematics Individual Report, and

Principals and parents of students in grades 4, 6, 8, or 11 receive a third type of report:

3. The 2000 DELAWARE STUDENT TESTING PROGRAM Science and Social Studies Individual Report. Reports for 8th and 11th grade students will be sent in September of 2000, reports for 4th and 6th grade students will be sent in February 2001.

Reports sent to administrators

Schools

Each school receives up to three reports for each grade level tested:

1. For students in grades 3, 5, 8, and 10, the 1999 DELAWARE STUDENT TESTING PROGRAM English Language Arts Summary Report for the School,
2. For students in grades 3, 5, 8, and 10, the 1999 DELAWARE STUDENT TESTING PROGRAM Mathematics Summary Report for the School, and
3. For students in grades 4, 6, 8, and 11, the 2000 DELAWARE STUDENT TESTING PROGRAM Science and Social Studies School Summary Report. (Reports for 8th and 11th grade students will be sent in September of 2000, reports for 4th and 6th grade students will be sent in February 2001.)

Districts:

Each district receives district-wide reports for each 3rd, 4th, 5th, 6th, 8th, 10th and 11th grade level tested:

1. For students in grades 3, 5, 8, and 10, the 1999 DELAWARE STUDENT TESTING PROGRAM English Language Arts Summary Report for the district,
2. For students in grades 3, 5, 8, and 10, the 1999 DELAWARE STUDENT TESTING PROGRAM Mathematics Summary Report for the district, and
3. For students in grades 4, 6, 8, and 11, the 2000 DELAWARE STUDENT TESTING PROGRAM Science and Social Studies District Summary Report for the district. (Reports for 8th and 11th grade students will be sent in September of 2000, reports for 4th and 6th grade students will be sent in February 2001.)

Individual and group reports available to teachers from the DSTP-OR reporting system

Teachers who have permission, and school administrators can receive reports of:

1. English language arts scores for individual students or groups of students;
2. English language arts instructional needs for groups of students;
3. Mathematics scores for individual students or groups of students;
4. Mathematics instructional needs for groups of students;
5. Science and social studies raw scores for individual students or groups of students that includes science and social studies test score analysis for groups of students.

On-line reports can be downloaded into an Excel spreadsheet and overall scores computed for any selected group of students. Examples of the DSTP-OR system reports can be found in Appendix C.

SECTION II: UNDERSTANDING THE ENGLISH LANGUAGE ARTS REPORT

There are two sources of the score reports that are available to teachers:

- Individual and school score reports produced by Harcourt Educational Measurement and sent to school administrators; and
- Individual or classroom score reports that can be produced by the new DSTP-OR secure system.

The reports produced by Harcourt Educational Measurement are automatically sent to your principal. Score reports can also be produced via the new DSTP-OR secure system. Depending on the policies in your school, you may request the reports through your principal or you may access the DSTP-OR system directly. The system is highly secure and is password protected. A password to use this system must be requested through your principal. To generate a classroom report, you must supply the name or the state-student ID for each student in each of your classes.

Reports Produced by Harcourt Educational Measurement

The individual student and school score reports your principal receives from Harcourt Educational Measurement contains seven sections of information regarding school wide student performance:

Individual student reports

1. Grade, testing date and SAT9/Level and Form; and the date the SAT9 Norms were developed.
2. The reading scaled score for each **student** compared to other students at the **same grade level** in the school;
   The average reading scaled score for the **school** (for students in the **same grade** as the student);
   The average reading scaled score for the **district** (for students in the **same grade** as the student);
   The average reading scaled score for the **State of Delaware** (for students in the **same grade** as the student);
3. The writing score of the **student** compared to other students at the **same grade level** in the school;
   The average writing score for the **school** (for students at the **same grade** as the student);
   The average writing score for the **district** (for students in the same grade as the student);
   The average writing score for the **State of Delaware** (for students in the **same grade** as the student);
4. The student's SAT9 percentile rank for reading;
5. The student's Performance Level and score in reading and in writing; and
6. The student's Instructional Needs in reading and writing.

Examples of these reports can be found in Appendix A.

School summary reports

1. Grade, testing date and SAT9/Level and Form; and the date the SAT9 Norms were developed.
2. The average reading scaled score for the **students** in your school compared to:
   - The **district** (for students in the **same grade** as your students);
   - The **State of Delaware** (for students in the **same grade** as your students);
3. The writing score of **students** in your school compared to:
   - The **district** (for students in the **same grade** as your students);
   - The **State of Delaware** (for students in the **same grade** as your students);
4. The school's average SAT9 percentile rank for reading;
5. A summary of your school's Performance Level and score in reading and in writing, and

6. A summary of your school's Instructional Needs comments for reading and writing.

Examples of these reports can be found in Appendix A.

District summary reports

1. Grade, testing date and SAT9/Level and Form; and the date the SAT9 Norms were developed.
2. The average reading scaled score for the **students** in your district compared to the **State of Delaware** (for students in the **same grade** as your students);
3. The writing score of **students** in your school compared to the **State of Delaware** (for students in the **same grade** as your students);
4. The district's average SAT9 percentile rank for reading;
5. A summary of your district's Performance Level and score in reading and in writing, and
6. A summary of your district's instructional needs comments for reading and writing.

Examples of these reports can be found in Appendix A.

Each section of the English Language Arts Individual Report is discussed separately.

Grade, Testing Date, SAT9 Level/Form and SAT9 Norms

This part of the score report provides general information about the administration of the test:

- The grade level of students (03, 05, 08, or 10) is reported next to **Grade**.
- The date students took this test is then listed.

SAT9 Level/Form and Norms

Following the test date is the SAT9 **Level/Form**. The SAT9 is an acronym for the *Stanford Achievement Test-Ninth Edition*. The SAT9 is a standardized, nationally administered test. To create the national norms for the SAT9, it was administered to a representative sample from 225,000 to 250,000 students nationwide. Their score results are referred to as national norms, or more usually, "norms". The norms become a reference point against which to compare the performance of any student who then takes the SAT9. The norms for the 2000 test were developed in 1995.

Score comparisons of grade tested: Reading

Individual student score

This section contains score comparisons of the student's reading score against all of the students at the **same grade level** who took the test in the school, in the district and in the state. The students' average score is found on the line between the lowest scale score listed on the left-hand side of the line and the maximum scale score on the right. Remember that each student in your school is being compared with other students at the **same grade** level in the school, in the district and in the state.

If you have classes of students at different grade levels, you will see that different grade levels have different scale values. For tenth grade students, the scale listed ranges from 250 to 800; for eighth grade students, it ranges from 225 to 775; for fifth grade students, it ranges from 175 to 700; and for third grade students, it ranges from 150 to 675. It is expected that older students will perform at a higher level than younger students will. Appendix A contains a copy of the individual student score report.

The school score

In this section you can also see how all the students in your school are performing on reading compared to all the students in the district who took the test by examining the position of the school's score on the scale. Remember that these scores reflect performance of students in the **same grade** as your students. The individual student report shows the school's average reading score as does a copy of your school's score report sent to your principal. Appendix A contains a copy of school summary report.

The district score

In this section you can also see how all the students in your school district are performing on reading compared to all the Delaware students who took the test by examining the position of the district's score on the scale. Remember that these scores reflect performance of all district students in the **same grade** as your students. The district score is reported on the individual score report and the school summary report as well as the district summary report sent to superintendents. Appendix A contains a copy of the district summary report.

The state of Delaware score

In this section you can also see how all the students who took the test in the State of Delaware are performing on reading by examining the position of the state's score on the scale. Remember that these scores reflect the performance of all students in the **same grade** as your students. The state score is reported on the individual score report, the school summary report, and the district summary report as well as the statewide score report sent to the Department of Education. Appendix A contains a copy of the statewide score report.

Score comparisons of grade tested: Writing

This score is the total points your students received on two writing prompts. The first prompt is based on a reading passage and is called a text-based writing prompt; that is, students must read a passage and then answer a question and write about what they read. They have approximately 30 minutes to do this.

The second prompt stands by itself. Students respond to a few sentences that prompt them to write about a topic or an issue. Students have 2 hours to respond to this prompt. The text-based prompt is scored by one judge, the stand-alone prompt is scored by two judges, and the total writing score is the combination of all three scores. A maximum of 5 points and a minimum of 1 point can be awarded by each judge, thus the maximum score is 15 (5+5+5) and the minimum score is 3 (1+1+1). The students'

writing score is found on the line between the values of 3 to 15. Appendix B contains examples of these writing items for grades 3, 5, 8, and 10.

Individual student report

This writing section contains score comparisons of the students' average writing score in your school against students who took the test in the district, and in the State of Delaware. Appendix A contains a copy of the individual student score report.

The school score

In this section you can also see how all the students in your school are performing on writing compared to all the students in the district who took the test by examining the position of the school's score on the scale. Remember that these scores reflect performance of students in the **same grade** as your students. The individual student report shows the school's average writing score as does a copy of your school's summary report sent to your principal. Appendix A contains a copy of school summary report.

The district score

In this section you can also see how all the students in your school district are performing on writing compared to all the Delaware students who took the test by examining the position of the district's score on the scale. Remember that these scores reflect the performance of all district students in the **same grade** as your students. The district score is reported on the individual summary report and the school summary report as well as the district summary report sent to superintendents. Appendix A contains a copy of the district summary report.

The state of Delaware score

In this section you can also see how all the students who took the test in the State of Delaware are performing on writing by examining the position of the state's score on the scale. Remember that these scores reflect the performance of all state students in the **same grade** as your students. The state score is reported on the individual score report, the school summary report and the district summary report as well as the statewide summary report sent to the Department of Education. Appendix A contains a copy of the statewide report.

Average percentile rank: Reading

SAT9

The percentile rank for reading is obtained from the abbreviated form of the SAT9 that is embedded in the DSTP. The SAT9 is the timed portion of the DSTP, and is included for several reasons:

- It allows national comparisons of the reading performance of Delaware students on a nationally used standardized test, thus permitting the comparison of student performance on general reading proficiency to other students across the United States.

- A subset of the SAT9 items is directly related to the Delaware Reading Standards and is a part of the DSTP score.
- The embedded SAT9 items permit the important and efficient psychometric process of equating and scaling the DSTP from one administration of the test to subsequent administrations of the test.

Percentile rank

A percentile rank is a way of looking at how well a student performed on the SAT9 Reading test relative to all the same grade students in the national norms. Percentile rank gives the additional information as to what percentage of **same grade** students in the norms scored higher or lower than a student. Similarly, an average percentile rank is a way of looking at how well students in your school performed on the SAT9 Reading test relative to all the same grade students in the national norms. Percentile rank gives you the additional information as to what percent of **same-grade** students in the norms scored higher or lower than the students in your school. For example, if the students in your school had an average reading percentile rank of 91, it means that 91 percent of the students in the national norms scored **below** the average rank of your students and only 9 percent scored **at or higher**. If the students in your school had an average reading percentile rank of 54, it means that 54 percent of the students in the national norms scored **below** your students and that 46 percent scored **at or higher** than your students. If the students in your school had an average percentile rank of 29, it means that 29 percent of students in the national norms scored **below** your students and that 71 percent scored **at or higher**.

In some cases students might score higher or lower on the SAT9 Reading test than on the DSTP Reading test. It must be kept in mind that the students' average SAT9 percentile rank score cannot be directly compared to the relative scale position of the DSTP Reading test score. There are several reasons why these scores are non-comparable:

- The SAT9 Reading test is not directly aligned with Delaware Reading Content Standards. A portion of the SAT9 Reading test is related to the Reading Content Standards and is included in the DSTP score, whereas the DSTP Reading test is **completely aligned** with the English Language Arts Content Standards.
- The SAT9 is entirely comprised of multiple choice items, whereas the DSTP is comprised of multiple choice, short answer, and extended response items. Writing short answers and extended responses requires very different skills than selecting the answer on a multiple-choice item. Because the items on the SAT9 and the DSTP Reading test are very different in format (multiple choice vs. multiple choice, short answer, and extended response), they measure very different aspects of reading, and their results cannot be directly compared.
- The score for the DSTP Reading test is based on a substantially larger number of test items than the score for the SAT9 Reading test. This means that the DSTP Reading test samples a larger portion of the student's reading skills as defined by the English Language Arts Content Standards than does the SAT9.

Appendix A contains a copy of an individual score report containing percentile ranks, and a copy of a school summary report containing percentile ranks.

Performance levels

Performance levels were developed during the fall of 1999. To determine performance level, cut scores were first developed.

Cut point development

During the fall of 1999, a group of 188 participants consisting of 83% teachers, 7% administrators, 9% parents, and 1% of participants from organizations or from the community, met under the guidance of Harcourt Educational Measurement, to develop the "Meets the Standard" and "Exceeds the Standard" cut points. A subset of these participants developed the cut points for reading and writing. The methodology used by judges for setting the cut points is referred to as "Item Mapping" by some measurement companies, and "Bookmarking" by other companies. This procedure required several groups of judges to examine a book of DSTP items arranged from the easiest to the most difficult and inserting "bookmarks" at the items they felt most strongly defined where a cut should be placed. Each group of judges worked with a single test at a single grade. Once the judges' recommendations had been finalized, the Department of Education, with the technical assistance of Harcourt Educational Measurement, calculated the cut points for the "Below the Standard" and "Well Below the Standard" levels, and the cut point for the "Distinguished" performance level.

Performance levels: Reading and Writing

There are five performance levels in reading and writing that are consistent with Delaware's accountability law. The following describe each level:

Performance Level		Described as:
Level 5	Distinguished Performance	Exemplary performance
Level 4	Exceeds the Standard	Very Good
Level 3	Meets the Standard	Good
Level 2	Below the Standard	Needs Improvement
Level 1	Well Below the Standard	Needs Significant Improvement

Cut points: Reading

The cut points for the DSTP reading Scale Score are as follows:

	Well Below the Standard	Below the Standard	Meets the Standard	Exceeds the Standard	Distinguished Performance
Grade 3	386	387	411	465	482
Grade 5	426	427	451	508	529
Grade 8	474	475	500	564	584
Grade 10	476	477	502	573	593

Each scale score indicates the lowest score on the DSTP a student could earn and still achieve the indicated level. **Beginning with this spring 2000 DSTP score results, students who fall into the "Below the Standard" and "Well Below the Standard" in reading at grades 3, 5, and 8 will be required to have an Individual Improvement Plan (IIP) developed for them.**

In the future, the Performance Level for reading and mathematics for each individual student will be used to determine if the student will receive recognition and awards, whether or not the student will attend summer school, be promoted to the next higher grade, or be eligible for a State of Delaware diploma.

Cut points: Writing

The cut points for the DSTP Writing Raw Score are as follows:

	Well Below the Standard	Below the Standard	Meets the Standard	Exceeds the Standard	Distinguished Performance
Grade 3	4	5	7	11	13
Grade 5	5	6	8	11	13
Grade 8	5	6	8	11	13
Grade 10	5	6	8	11	13

Each raw score indicates the lowest score on the DSTP a student could earn and still achieve the indicated level.

Instructional needs

This section of the report provides summary feedback that depends on what items the students in your school answered correctly and incorrectly, and/or how the items were answered.

Instructional needs: Reading

The reading instructional needs comments are produced by what answers a student gives to clusters of test items. On the Individual Student Score Report for example, if a student answered incorrectly a series of open-ended reading items that needed more details, then a comment would be produced suggesting that the student work on "producing enough details to answer open-ended questions." Likewise, if items that measured the student's ability to understand the central ideas in a piece of text are answered incorrectly, then a comment would be produced stating that the student needed to work on "understanding the central ideas in a text."

On the School Summary Report, all comments produced (triggered) by all students in your school are listed. On the District Summary Report, all comments produced by all students in your district are listed. For each comment, the number, and the percent of students that triggered the comment is reported.

The summary of individual student instructional needs for your school can provide information about the areas in which the students need to improve performance. **It is strongly recommended that in addition to reading your school summary report, you also review the individual student report for each student in your classroom.** When reviewing the individual reports, you will find that each student's report will likely differ from another student's report in this section.

It should be noted that the comments on the instructional needs in reading:

- reflect the Delaware content standards for reading;
- are listed from basic to complex as indicated in the Delaware content standards for reading;
- were developed to help teachers examine the instructional needs of their students.

The reading standards support twelve broadly stated comments that relate to reading. Not all comments are triggered at all grade levels. Following are the comments that can be triggered by student responses to one or more of the reading items.

- Providing enough details to answer open-ended questions[1]
- Reading more carefully to better understand what is happening in a text
- Understanding the central ideas in a text
- Identifying information necessary to understanding a text
- Using information to make reasonable interpretations
- Identifying and understanding why a text was written
- Drawing conclusions based on information in the text
- Understanding the effects of an author's decisions
- Connecting and synthesizing information into a clear interpretation within and across texts, ideas, and concepts
- Formulating, expressing, and supporting opinions
- Making and supporting inferences about contents, events, characters, setting, theme, and style
- Continuing use of good reading strategies

Instructional needs: Writing

In writing, a cluster of comments is produced (triggered) according to a student's "average" performance **score** across two writing prompts. Triggering the cluster of comments in this way allows us to create a hierarchy of comments that will help push all students toward the upper end of the state writing rubric (scoring guide), and thus toward the state standards for writing.

It should be noted that the comments on the Instructional Needs in writing:

- reflect the Delaware content standards for writing;
- provide parents with information regarding their student's strengths and weaknesses in writing;

[1] This comment refers to the degree to which students provided complete answers to constructed response items.

- were developed to help teachers examine the instructional needs of their students;
- occur in "clusters" as opposed to individual comments to better reflect the integrated nature of the writing rubric (scoring guide) and the Delaware writing standards.

The writing standards support four broadly stated clusters of comments that directly relate to writing. The clusters are hierarchical in nature, that is, Cluster 1 reflects the most instructional needs a student requires for improvement, and Cluster 4 reflects the fewest necessary for improvement.

Each student who took the test will receive a cluster of comments that match their **scores**. Following are the comments that can be triggered by a student's written responses. The comments come directly from the state writing rubric (scoring guide) and the state standards. Two comments: "organizing their writing around a simple topic or central idea" and "working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding," are repeated in clusters 1 and 2 to show that developing writers need continued instruction in these areas.

Cluster 1

- organizing the writing around a simple topic or central idea
- writing in complete sentences with a variety of length and structure
- working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding
- doing more than restating the prompt

Cluster 2

- organizing the writing around a simple topic with an introduction, closing, and some transitions
- working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding
- supporting ideas with more specific details
- doing more than making generalities regarding the prompt

Cluster 3

- using effective and varied introduction and closing
- writing in a consistent style with precise vivid word choice
- writing with a clear logical progression of ideas using smooth transitions
- including relevant details that are fully elaborated

Cluster 4

- "Congratulations on an excellent performance" on at least one of the two writing prompts.
- The comments below are to encourage the student to strive for excellence by:
  - continuing to write using distinctive voice and style
  - showing an exceptional awareness of readers' needs

It is strongly recommended that in addition to reviewing your school summary report, you also review the individual score report for each student in your classroom. These reports can be obtained from your principal in written form and from the DOE website DSTP-OR intranet system (see your principal for access to this system). When reviewing the individual reports, you will find that students who have similar scores will have the same comments triggered.

The instructional needs comments contain information that you can utilize when making decisions about writing instruction for your students. Remember that the school summary report will indicate the number and percent of students in the school for whom the comment clusters were triggered. This means that the higher the percentage of students indicated as having a need, the more likely it is that additional instruction in that area of the standards will improve test scores.

Reports Generated by the DSTP- OR System

A DSTP-OR system report can be obtained through the Delaware DOE Web site. The site is **secure** and a password is required to access student information. **Contact your principal regarding the policy for requesting this secure information**. Teachers can obtain a password through approval of their principal to directly access student data. See Appendix C for application instructions. The reports provide student score information for English language arts (reading and writing), mathematics, science, and social studies. There are several reports that may be of special interest to you as a classroom teacher:

1. List of test scores and/or performance levels of selected students in your classroom or school;
2. Summary report of test scores and/or performance levels of selected students in your classroom or school;
3. Instructional needs report for selected students or school.

List of test scores of selected students

Test scores from the 1998, 1999, and 2000 spring tests are available. Students must be selected by name or ID. You will need to select the exact names of students or provide the state ID numbers of the students in your class to retrieve this information. A request can be made for a report listing all scores (reading, writing, mathematics, science and social studies), or for a separate report for reading, writing, mathematics, science or social studies. Additional demographic information such as race, gender, Title I, special education (SPED), LEP status (LEP), and whether their score(s) can be aggregated (AGG) can also be requested (See the listed options in Appendix C). An example of the downloaded EXCEL report can also be found in Appendix C of this guide.

Score and performance information:

- IIP status;
- Reading performance level for each student;
- Reading scaled score for the class;
- Reading percentile rank;
- Reading NCE score;
- Writing performance level;
- Writing raw score;
- Mathematics performance level;
- Mathematics scale score;
- Mathematics percentile rank;
- Mathematics NCE score;
- Science raw score; and
- Social studies raw score.

Each section of the report for language arts test scores is discussed separately.

IIP Status

The results of the spring 2000 reading tests in grades 3, 5, and 8 will determine whether or not students will be required to have an **Individual Improvement Plan (IIP)** for the 2000-2001 school year. Students who fall into the "Below the Standard" and "Well Below the Standard" performance levels will be required to have an IIP. This plan will outline what extra assistance the student will need and how that assistance will be provided by the school. Parents must participate with the school in developing this plan.

Reading performance level

There are five performance levels in reading that are consistent with Delaware's accountability law. A discussion of the development of reading cut scores, the cut scores themselves, and the resultant performance levels can be found on pages 13 and 14 of this document.

Reading scaled score

This section contains the reading scaled score for each of the students in your class. A student's number of correct responses to test items is called a raw score. On the DSTP the reading raw scores are converted to scaled scores by use of the Item Response Theory, Rasch Model process. This is a widely accepted scaling procedure used by testing companies. The primary purpose of converting raw scores to scaled scores is to aid in interpreting students' test results. The scaled scores on the DSTP permit comparison of the scores of a student over time from grade 3 to grade 5 to grade 8 to grade 10. Scaled scores allow an examination of the student's growth over time. Scaling also permits the examination of other trends in performance of **groups of students** over time.

Reading percentile rank

This section contains the reading percentile rank for each of the students in your class. A discussion on the meaning of the percentile rank can be found on pages 11 and 12 of this document.

Reading NCE score

This section contains the reading NCE (Normal Curve Equivalent) Score. The NCE is a normalized standard score that has a mean of 50 and a standard deviation of 21.06. The NCE standard score ranges from 1 to 99, like that of the percentile rank. In fact, the NCE scores of 1, 50, and 99 are equivalent to percentile ranks of 1, 50, and 99. The other NCE values are distributed somewhat closely to the distribution of the percentile rank and **must be used** to compute the **average** percentile rank of a group of students. To do this, the percentile rank of each student should be converted to an NCE score, the NCE scores are then averaged, and the resultant NCE average converted back to a percentile rank. If you use the DOE system to compute the average percentile rank, the program will automatically do these conversions and give you the **correct** average percentile rank. An example of the conversion table available to you on the website is found in Appendix C.

Writing performance level

There are five performance levels in writing that are consistent with Delaware's accountability law. A discussion of the development of writing cut scores and the resultant performance levels can be found on pages 13 and 14 of this document.

Writing raw score

This section contains the writing raw score for each of the students in your class. Writing is assessed in two ways: First, students are asked to write an extended essay in response to a prompt. Second, to reflect that reading and writing are integrally connected, students are asked to write a short essay responding to a question about a reading passage from the reading portion of the test. This essay is scored for both reading and writing. Trained scorers use rubrics and anchor papers (previously scored student papers) to determine the degree of success of a particular response. Each essay is scored by two different scorers, each assigning a score from 1 to 5. The text-based response is scored by a single scorer who assigns a score from 1 to 5. The three scores are added together to determine the student's standards-based score for writing. The possible scores at each grade are from 3 to 15. There is no nationally-normed writing test; thus, there are no percentile ranks for writing.

Summary of test scores of selected students

This report shows the grade level of your students, content area (reading or writing), each type of score within each of these content areas, the number of students in your class, the mean score, standard deviation, and percent at each of the five performance levels for your class, your school, your district, and the state. Remember that all these scores are for students at the **same grade level** as your students. The data can also be disaggregated (separated out) by Gender, Race, Title I, LEP, and/or Special

Education. Graphs are available to help you better understand the data. See Appendix C for an example of this report.

Instructional needs

Instructional needs reports are also available on the DSTP-OR system. The reports provide the number and percent of students in your class who received each indicator comments for reading or writing. There are no individual instructional needs reports available for each student. See Appendix C for an example of this report.

Using the Instructional Needs: Reading and Writing

Ideas for reflection: Reading

Following is a list of broadly stated questions that you can ask yourself and can discuss with other teachers as you reflect on the instructional needs comment reports for reading in an attempt to help students improve. As no two classrooms are exactly alike, it is our hope that these questions will lead you to answers that are specific to the needs of your students.

- How does your reading instruction align with the Delaware standards for reading?
- What does reading instruction look like in your classroom?
- What pre-reading strategies do you use to help students get ready to read?
- What strategies do you use to help students self-monitor their comprehension?
- What strategies do you use to help students critically analyze and evaluate text?
- What strategies do you use to help students identify the central ideas in a text?
- Do your students have ample opportunity to read?
- Do you or your students keep reading logs or reading journals?
- How do your students select books and other materials for independent reading?
- What do you do to encourage students to read a variety of materials, e.g., literary, informative, technical?
- What opportunities do you provide for students to talk about what they have read?
- Do your students write about what they have read?
- How do you encourage students to compare and contrast information from a variety of sources?
- How do you assess students' reading?
- How do your students assess their own reading?

Ideas for reflection: Writing

Following is a list of broadly stated questions that you can ask yourself and discuss with other teachers as you reflect on the writing instructional needs reports in an attempt to help students improve their writing skills. As no two classrooms are exactly alike, it is

our hope that these questions will lead you to answers that are specific to the needs of your students.

- How does your writing instruction align with the Delaware standards for writing?
- What does writing instruction look like in your classroom?
- Do you teach the writing process?
- Do your students have ample opportunity to write?
- Do your students have ample opportunity to write for different purposes and audiences using a variety of forms?
- How do you help your students generate content for their writing?
- How do you help your students organize their writing?
- What strategies do you use to encourage your students to revise their writing?
- Do you encourage students to write in different content areas?
- How do you assess writing?
- Do you use the state writing rubric to teach and/or assess writing?
- How do your students assess their writing?
- How do you use assessment data to improve your students' writing?

Utilizing instructional needs

For a teacher to best utilize the information in the instructional needs part of the classroom report, the following steps are recommended.

1. Meet with other teachers according to standards grouping (i.e., K-3, 4-5, 6-8, 9-10/11) to review the comments and the related standards. It is highly desirable that all teachers within a grade cluster participate in the discussions. The accountability system and the DSTP reflect the degree of success at reaching the standards, which is much broader and more comprehensive than a single grade level.

2. Discuss the kinds of practices, assignments, teaching strategies, etc. that you are using, and whether or not those practices are in line with the standards and address the comments. Some suggestions are included in this guide.

3. Work through the reports with the groups of teachers, discussing strengths, and areas for improvement. If a school seems to have all the comments triggered at about the same rate, teachers should be encouraged to prioritize their efforts so they don't feel as if they have to do everything all at once. Be sure to talk about the kinds of activities that you feel would help students in the particular area(s) of the standards where they seem to need some help.

4. Go through each comment and the related standards to discuss what you might say to a parent whose child has had a particular comment triggered. The comments were intentionally written in teacher/standards language, which will be foreign to some parents, and they will need some clarification. Be prepared to explain to parents how you intend to address their concerns in your teaching practices.

5. Meet regularly throughout the year to review your progress in teaching the standards, working with parents, etc.

This kind of strategy should help make the best use of the instructional needs data, particularly in terms of helping understand the standards and what they can do to help students perform at even higher levels. We would encourage you to read the data carefully and make decisions about how and what to teach.

We would also encourage you not to expect easy solutions, quick fixes, or step by step approaches that presume the test has been designed to solve problems—it has not. The DSTP was specifically designed to help identify student strengths and weaknesses, but working to enhance their strengths and to overcome their weaknesses is best placed in your hands as professionals who instruct students on a daily basis.

Finally, we would point out that the most **INAPPROPRIATE** thing that could be done with the instructional needs report is to compare classrooms, either with each other or with a state or district average. The comments supplied in the reports were designed to provide valid data at the individual classroom level only.

The instructional comments for reading provide information that you can utilize when making decisions about reading instruction for your students. Remember that the classroom level report will indicate the number and percent of students in the classroom for whom the comment was triggered. This means that the higher the percentage of students indicated as having a need, the more likely it is that additional instruction in that area of the standards will improve test scores.

Parent-Teacher Conference Materials

Several recently published documents may be of value to you when meeting with parents about the test scores of their children:

PTA Parent/Family Resource Guide

This guide is published by the Delaware PTA, and found in every school, community center, and library in Delaware. The guide can also be found on the web page of the Delaware PTA at: **www.delawarepta.org**. Particularly relevant sections of the handbook cover the following topics:

- Student learning
- Tips to motivate your children to do well in school
- Homework hints
- Help your child learn at home
- Making learning enjoyable
- Know your child's learning style
- Activities to help your child as a reader

The handbook is considered a public document; therefore, it can be downloaded and/or unlimited copies can be made of various sections for parent-teacher conferences.

Parent's Declaration of Responsibilities

This document is published by the Delaware PTA, and found in every school, community center, and library in Delaware. It can also be found on the web page of the Delaware PTA at: **www.delawarepta.org**. Provided is information on how the parent and family can get involved in the education of their children. Topics covered include:

- Communication: Parent/Family Responsibilities and School Responsibilities
- Parenting: Parent/Family Responsibilities and School Responsibilities
- Student Learning: Parent/Family Responsibilities and School Responsibilities
- Volunteering: Parent/Family Responsibilities and School Responsibilities
- School Decision Making and Advocacy: Parent/Family Responsibilities and School Responsibilities
- Collaborating with the Community: Parent/Family Responsibilities and School Responsibilities

The document is considered a public document; therefore, it can be downloaded and/or unlimited copies can be made of various sections for parent-teacher conferences.

SECTION III: UNDERSTANDING THE MATHEMATICS REPORT

There are two sources of the score reports that are available to teachers:

- Individual and school score reports produced by Harcourt Educational Measurement and sent to school administrators; and
- Individual and group score reports that can be produced by the new DSTP-OR secure system.

The reports produced by Harcourt Educational Measurement are automatically sent to your principal. Score reports can also be produced via the new DSTP-OR secure system. Depending on the policies in your school, you may request the reports through your principal or you may access the DSTP-OR system directly. The system is highly secure and is password protected. A password to use this system must be requested through your principal. To generate a classroom report, you must supply the name or the state-student ID for each student in each of your classes.

Reports Produced by Harcourt Educational Measurement

The individual student and school score reports your principal receives from Harcourt Educational Measurement contain six sections of information regarding student performance:

Individual student report

1. Grade, testing date and SAT9/Level and Form; and the date the SAT9 Norms were developed.

2. The mathematics scaled score for each **student** compared to other students at the **same grade level** in the school;
   The average mathematics scaled score for the **school** (for students in the **same grade** as the student);
   The average mathematics scaled score for the **district** (for students in the **same grade** as the student);
   The average mathematics scaled score for the **State of Delaware** (for students in the **same grade** as the student);
3. The student's SAT9 percentile rank for mathematics;
4. The student's Performance Level and score in mathematics; and
5. The student's instructional needs in mathematics.

School summary report

1. Grade, testing date and SAT9/Level and Form; and the date the SAT9 Norms were developed.
2. The average mathematics scaled score for the **students** in your school compared to:
   - The **district** (for students in the **same grade** as your students);
   - The **State of Delaware** (for students in the **same grade** as your students);
3. The school's average SAT9 percentile rank for mathematics;
4. A summary of your school's Performance Level and scores in mathematics; and
5. A summary of your school's instructional needs comments for mathematics.

District summary reports

1. Grade, testing date and SAT9/Level and Form; and the date the SAT9 Norms were developed;
2. The average mathematics scaled score for the **students** in your district compared to the **State of Delaware** (for students in the **same grade** as your students);
3. The district's average SAT9 percentile rank for mathematics;
4. A summary of your district's Performance Level and scores in mathematics; and
5. A summary of your district's instructional needs comments for mathematics.

Examples of these reports can be found in Appendix A. Each section of the mathematics individual report is discussed separately.

Grade, Testing Date, SAT9 Level/Form and SAT9 Norms

This part of the score report provides general information about the administration of the test:

- The grade level of the students (03, 05, 08, or 10) is reported next to **Grade**.
- The date the students took this test is then listed.

SAT9 norms

Following the test date is the SAT9 **Level/Form**. The SAT9 is an acronym for the *Stanford Achievement Test-Ninth edition*. The SAT9 is a standardized, nationally

administered test. To create the norms, the SAT9 Mathematics test was administered to a representative sample of approximately 250,000 students nationwide, and their mathematics score results are referred to as "norms". The norms become a reference point used to compare the performance of any student who then takes the SAT9. For the 2000 tests, the year the norms were developed for mathematics was 1995.

Score comparisons of grade tested

Individual student score

This section contains score comparisons of the student's mathematics score against all of the students at the **same grade level** who took the test in the school, in the district and in the state. The students' average score is found on the line between the lowest scale score listed on the left-hand side of the line and the maximum scale score on the right. Remember that each student in your school is being compared with other students at the **same grade** level in the school, in the district and in the state.

If you have students at different grade levels, you will see that different grade levels have different scale values. This difference is related to the highest and lowest score that the students would normally be expected to achieve at each different grade level. For tenth grade students, the scale listed ranges from 300 to 800; for eighth grade students, the scale ranges from 250 to 750; for fifth grade students, it ranges from 175 to 700; and for third grade students, it ranges from 150 to 650. It is expected that older students will perform at a higher level than younger students will. Appendix A contains a copy of individual score report.

The school score

In this section you can also see how all the students in your school are performing on mathematics compared to all the students in the district who took the test by examining the position of the school's score on the scale. Remember that these scores reflect performance of students in the **same grade** as your students. The individual student report shows the school's average mathematics score as does a copy of your school's score report sent to your principal. Appendix A contains a copy of school summary report.

The district score

In this section you can also see how all the students in your school district are performing on mathematics compared to all the Delaware students who took the test by examining the position of the district's score on the scale. Remember that these scores reflect performance of all district students in the **same grade** as your students. The district score is reported on the individual score report and the school summary report as well the district summary report sent to superintendents. Appendix A contains a copy of the district summary report.

The state of Delaware score

In this section you can also see how all the students who took the test in the State of Delaware are performing on mathematics by examining the position of the state's score

on the scale. Remember that these scores reflect the performance of all students in the **same grade** as your students. The state score is reported on the individual score report, the school summary report, and the district summary report as well as the statewide summary report sent to the Department of Education. Appendix A contains a copy of the statewide summary report.

Average Percentile Rank

SAT9

The percentile rank for mathematics is obtained from the abbreviated form of the SAT9 that is embedded in the DSTP. The SAT9 is the timed portion of the DSTP, and is included for several reasons:

- It allows comparisons of the mathematics performance of Delaware students on a nationally used standardized test, thus permitting the comparison of student performance on general mathematics proficiency to other students in the United States.
- A subset of the SAT9 items is directly related to the Delaware Mathematics Standards and is part of the DSTP score.
- The embedded SAT9 items permit the important and efficient psychometric process of equating and scaling the DSTP test from one administration of the test to subsequent administrations of the test.

Percentile rank

An average percentile rank is a way of looking at how well the students in your school performed on the SAT9 Mathematics test relative to all the same grade students in the national norms. Percentile rank gives you the additional information as to what percent of **same-grade** students in the norms scored higher or lower than your students. For example, if the students in your school had an average mathematics percentile rank of 91, it means that 91 percent of the students in the national norms scored **below** the average rank of your students and only 9 percent scored **at or higher**. If the students in your school had an average mathematics percentile rank of 54, it means that 54 percent of the students in the national norms scored **below** your students and that 46 percent scored **at or higher** than your students. If the students in your school had an average percentile rank of 29, it means that 29 percent of students in the national norms scored **below** your students and that 71 percent scored **at or higher**.

In some cases students might score higher or lower on the SAT9 Mathematics test than on the DSTP Mathematics test. It must be keep in mind that the students' average SAT9 percentile rank score cannot be directly compared to the relative scale position of the DSTP Mathematics test score. There are several reasons why these scores are non-comparable:

- The SAT9 Mathematics test is not directly aligned with Delaware Mathematics Content Standards. A portion of the SAT9 Mathematics test is related to the Mathematics Content Standards and is included in the DSTP score, whereas the DSTP Mathematics test is **completely aligned** with the Mathematics Content Standards.

- The SAT9 is entirely comprised of multiple choice items, whereas the DSTP is comprised of multiple choice, short answer, and extended response items. Writing short answers and extended responses require very different skills than selecting the answer on a multiple-choice item. Because the items on the SAT9 and the DSTP Mathematics test are very different in format (multiple choice vs. multiple choice, short answer, and extended response), they measure very different aspects of mathematics, and their results cannot be directly compared.
- The score for the DSTP Mathematics test is based on a substantially larger number of test items than the score for the SAT9 Mathematics test. This means that the DSTP Mathematics test samples a larger portion of the student's mathematics skills as defined by the Mathematics Content Standards than does the SAT9.

Appendix A contains a copy of an individual score report containing percentile ranks and a school summary report containing percentile ranks.

Performance Levels

Performance levels were developed during the fall of 1999. To determine performance level, cut scores were first developed.

Cut point development

During the fall of 1999, a group of 188 participants consisting of 83% teachers, 7% administrators, 9% parents, and 1% of participants from organizations or from the community, met under the guidance of Harcourt Educational Measurement, to develop the "Meets the Standard" and "Exceeds the Standard" cut points. A subset of these participants developed the cut points for mathematics. The methodology used by judges for setting the cut points is referred to as "Item Mapping" by some measurement companies, and "Bookmarking" by other companies. This procedure required several groups of judges to examine a book of DSTP items arranged from the easiest to the most difficult and inserting "bookmarks" at the items they felt most strongly defined where a cut should be placed. Each group of judges worked with a single test at a single grade. Once the judges' recommendations had been finalized, the Department of Education, with the technical assistance of Harcourt Educational Measurement, calculated the cut points for the "Below the Standard" and "Well Below the Standard" levels, and the cut point for the "Distinguished" performance level.

There are five performance levels in mathematics that are consistent with Delaware's accountability law. The following describe each level:

Performance Level		Described as:
Level 5	Distinguished Performance	Exemplary performance
Level 4	Exceeds the Standard Performance	Very Good
Level 3	Meets the Standard Performance	Good
Level 2	Below the Standard Performance	Needs Improvement
Level 1	Well Below the Standard Performance	Needs Significant Improvement

The cut points for the DSTP mathematics Scale Score are as follows:

	Well Below the Standard	Below the Standard	Meets the Standard	Exceeds the Standard	Distinguished Performance
Grade 3	381	382	407	464	499
Grade 5	423	424	449	503	525
Grade 8	468	469	493	531	549
Grade 10	499	500	525	559	574

Each scale score indicates the lowest score on the DSTP a student could earn and still achieve the indicated level.

Beginning with this spring 2000 DSTP score results, students who fall into the "Below the Standard" and "Well Below the Standard" in mathematics in grade 8 will be required to have an Individual Improvement Plan (IIP) developed for them. In the future, the Performance Level for mathematics for each individual student will be used to determine if the student will receive recognition and awards, whether or not the student will attend summer school, be promoted to the next higher grade, or be eligible for a State of Delaware diploma.

Instructional Needs

This section of the report provides feedback that depends on what items each student in your classroom answered correctly and incorrectly, and/or how the items are answered. The number of students and the percent of students who triggered each comment are provided. **It is strongly recommended that in addition to reviewing your school summary report, you also review the individual student report for each student in your classroom.** When reviewing the individual reports, you will find that students who have similar scores will have the same comments triggered.

Reports Generated by the DSTP-OR System

A DSTP-OR system report can be obtained through the Delaware DOE Web site. The site is **secure** and a password is required to access student information. **Contact your principal regarding the policy for requesting this secure information**. Teachers can obtain a password through approval of their principal to directly access student data. (See Appendix C for approval process). The reports provide student score information for English language arts (reading and writing), mathematics, science, and social studies. There are several reports that may be of special interest to you as a classroom teacher:

1. List of test scores and/or performance levels of selected students in your classroom or school;
2. Summary report of test scores and/or performance levels of selected students in your classroom or school;
3. Instructional needs report for selected students or school.

List of test scores of selected students

Test scores from the 1998, 1999, and 2000 spring tests are available. Students must be selected by name or ID. You will need to select the exact names of students or provide the state ID numbers of the students in your class to retrieve this information. A request can be made for a report listing all scores (mathematics, reading, writing, science and social studies) or for a separate report for mathematics, reading, writing, science or social studies. Additional demographic information such as race, gender, Title I, special education (SPED), LEP status (LEP), and whether their score(s) can be aggregated (AGG) can also be requested. See the listed options in Appendix C. An example of the downloaded EXCEL report can also be found in Appendix C of this guide.

Score and performance information:

- IIP status;
- Mathematics performance level;
- Mathematics scale score;
- Mathematics percentile rank; and
- Mathematics NCE score;
- Reading performance level for each student;
- Reading scaled score for the class;
- Reading percentile rank;
- Reading NCE score;
- Writing performance level;
- Writing raw score;
- Science raw score; and/or
- Social studies raw score.

Each section of the report for mathematics test scores is discussed separately.

IIP Status

The results of the spring 2000 mathematics test in grade 8 will determine whether or not students will be required to have an **Individual Improvement Plan (IIP)** for the 2000-2001 school year. Students who fall into the "Below the Standard" and "Well Below the Standard" performance levels will be required to have an IIP. This plan will outline what extra assistance the student will need and how that assistance will be provided by the school. Parents must participate with the school in developing this plan.

Mathematics performance level

There are five performance levels in mathematics that are consistent with Delaware's accountability law. A discussion of the development of mathematics cut scores and the resultant performance levels can be found on pages 28 and 29 of this document.

Mathematics scaled score

This section contains the mathematics scaled score for each student selected. A student's number of correct responses to test items is called a raw score. On the DSTP the mathematics raw scores are converted to scaled scores by use of the Item Response Theory, Rasch Model process. This is a widely accepted scaling procedure used by testing companies. The primary purpose of converting raw scores to scaled scores is to aid in interpreting students' test results. The scaled scores on the DSTP permit comparison of the scores of a student over time from grade 3 to grade 5 to grade 8 to grade 10. Scaled scores allow an examination of the student's growth over time. Scaling also permits the examination of other trends in performance of **groups of students** over time.

Mathematics percentile rank

This section contains the mathematics percentile rank for each of the students in your class. A discussion on the meaning of the percentile rank can be found on pages 27 and 28 of this document.

Mathematics NCE score

This section contains the mathematics NCE (Normal Curve Equivalent) Score. The NCE is a normalized standard score that has a mean of 50 and a standard deviation of 21.06. The NCE standard score ranges from 1 to 99, like that of the percentile rank. In fact, the NCE scores of 1, 50, and 99 are equivalent to percentile ranks of the same numerical values. The other NCE values are distributed somewhat closely to the distribution of the percentile rank and are used to compute the **average** percentile rank of a group of students. To do this, the percentile rank of each student is converted to an NCE score, the scores averaged, and the resultant average score converted back to a percentile rank. If you use the DOE system to compute the average percentile rank, the program will automatically do these conversions and give you the **correct** average

percentile rank. An example of the conversion table available to you on the website is found in Appendix C.

Summary of test scores of selected students

This report shows the grade level of your students, content area, each type of score within the content area, the number of students you selected, the mean score, standard deviation, and percent at each of the five performance levels for the group of selected students, your school, your district, and the state. Remember that all these scores are for students at the same grade level as your students. This data can be disaggregated by Gender, Race, Title I, LEP, and/or Special Education. Also available are graphs to help you better understand the data. See Appendix C for an example of this report.

Instructional needs

Instructional needs reports are available on the DSTP-OR system. The reports provide the number and percent of students in your class who received each indicator comment for mathematics, reading and writing. There are no individual instructional needs reports available for each student. See Appendix C for an example of this report.

Using the Instructional Needs Comments

The mathematics instructional needs comments contain information that teachers can utilize when making decisions about mathematics instruction for their students. Remember that the instructional needs report will indicate the number and percentage of students for whom the comment was triggered. This means that the higher the percentage of students indicated as having a need, the more likely it is that additional instruction in that area of the standards will improve test scores.

It should be noted that the mathematics instructional needs:

- reflect the Delaware content standards for mathematics;
- are listed in a manner consistent with the Delaware standards for mathematics;
- were developed to help teachers examine the instructional needs of their students.

The mathematics standards support approximately twelve broadly stated comments—depending on the grade level—that relate to mathematics. Not all comments are triggered at all grade levels. The comments for the mathematics instructional needs reports were developed by grouping together several of Delaware's mathematics content standards with similar content. For example, content standards 5 and 6 are reported under the category *Number Concepts*. Standards 7 and 10 are reported under the category *Patterns, Algebra, and Functions*. Following are all the comments that can be triggered by student responses to the mathematics items. They are listed according to grade level so that teachers can see the connections and integration of concepts across the curriculum.

Grade 3

Number Concepts

- measuring
- using appropriate computation strategies
- using estimation skills to approximate an answer
- using the concept of place value
- using fractions to represent part of a whole

Patterns, Algebra, and Functions

- using basic number properties such as even/odd, reversibility of multiplication, etc.
- recognizing and extending a variety of patterns

Geometry

- recognizing and transforming geometric figures
- analyzing properties of simple geometric figures

Probability and Statistics

- reading and interpreting simple graphs
- determining the likelihood of simple events

Reasoning and Communication

- solving multi-step problems
- communicating mathematical arguments

Grade 5

Number Concepts

- measuring length or finding the area of simple figures
- using appropriate computation or estimation strategies
- using the concept of place value
- modeling fractions and decimals with situations and pictures
- using mathematical operations with understanding

Patterns, Algebra, and Functions

- using algebraic reasoning
- recognizing and extending a variety of patterns
- reading and interpreting simple graphs

Geometry

- recognizing and transforming geometric figures
- analyzing properties of simple geometric figures

Probability and Statistics

- constructing, reading, and interpreting simple graphs
- determining the likelihood of simple events
- calculating and using the mean (average) of a set of values in meaningful context

Reasoning and Communication

- solving multi-step problems
- communicating mathematical arguments
- reasoning about properties of numbers or geometric figures

Grade 8

Number Concepts

- using estimation skills to approximate an answer
- modeling fractions and decimals with situations and pictures
- determining the equivalence or relative sizes of fractions, decimals, percents, and exponential expressions
- applying the concepts of area and volume

Patterns, Algebra, and Functions

- representing concrete situations using graphs or variables
- recognizing, extending, or generalizing a variety of patterns
- solving simple equations using informal methods

Geometry

- transforming geometric figures
- analyzing properties of geometric figures

Probability and Statistics

- interpreting a variety of statistical graphs
- determining the probability of events

Reasoning and Communication

- solving multi-step problems
- communicating mathematical arguments

Grade 10

Number Concepts

- using mathematical operations, including exponents and roots, with understanding
- finding the area of regions or volumes of space shapes

Patterns, Algebra, and Functions

- using algebra to describe and analyze situations
- constructing and interpreting graphs
- solving equations and inequalities

Geometry

- analyzing and applying properties of geometric figures
- coordinate geometry
- applying right triangle relationships

Probability and Statistics

- determining the probability of events
- analyzing data and graphs

Reasoning and Communication

- multi-step problem solving
- communicating mathematical arguments

Ideas for reflection

Following is a list of broadly stated questions that you can ask as you reflect on the instructional needs reports in an attempt to help your students improve. As no two schools are exactly alike, it is our hope that these questions will lead teachers to answers that are specific to the needs of their students.

- Are there areas of instruction that seem to require more attention than they are currently receiving? For example, are probability and statistics integrated into the ninth and tenth grade mathematics curriculum?
- Are the topics that seem to need additional attention actually taught? For example, do sixth and seventh grade teachers "get to" geometry?
- When topics are presented, does the mode of instruction fit the desired outcomes? For example, do all elementary level students "estimate and then measure" a variety of objects using standard and non-standard units?
- Do teacher questions during instruction elicit higher-order thinking about the mathematics?
- Are students required to explain their work on tests and quizzes in writing or by drawing graphs or charts? Are rubrics used to score student responses?
- Do students need more experience applying concepts in context? Are problem contexts used to promote access for diverse learning?

Utilizing instructional needs

For a teacher to best utilize the information in this part of the report we would recommend the steps below. A brief vignette of a discussion around the geometry standard is included to help illustrate the process.

1. Teachers from a standards grouping (i.e., K-3, 4-5, 6-8, 9-10/11) meet to review the comments and the related standards. It is highly desirable that all teachers within a grade cluster participate in the discussions.

   A group of middle level mathematics teachers meet to examine the geometry comments triggered by their students. Teachers come prepared with the standards, their lesson plans, and their district curriculum guides.

2. Discuss the kinds of practices, assignments, teaching strategies, etc., that you are using, and whether or not those practices are in line with the standards and address the comments. Some suggestions are included in this guide.

   Teachers examine the comments and the patterns by which they were triggered. In our hypothetical example 25% of the students triggered transforming geometric figures, and 60% triggered Analyzing properties of geometric figures. Teachers should discuss the significance of the results—in this instance it would appear that they have done a fairly good job addressing the need identified in the standards to "recognize, construct, and transform geometric figures." However, it would also appear that some changes might be required if students were to improve at "analyzing properties of and discovering relationships among geometric figures." Teachers should be guided through Mathematics Standard 8, spatial sense and geometry, in an attempt to see where their own curriculum addresses the parts of the standards that the test indicates need to be addressed.

3. Work through the reports discussing strengths and areas for improvement. If a school seems to have all the comments triggered at about the same rate, teachers should be encouraged to prioritize their efforts so they don't feel as if they have to do everything all at once. Be sure to talk about the kinds of activities that you feel would help students in the particular area(s) of the standards where they seem to need some help.

   Teachers discuss the reasons why one of the bullets was triggered more often than the other. Was it a timing issue in the curriculum? Something the adopted text doesn't cover? etc. Is the conversation one that will require teachers from the elementary or the high school and/or the district as well to ensure that materials covered at one level are built on at the next level rather than just repeated?

   Or is it the way the material is being presented? Are students being asked to discover or investigate the properties, as opposed to just listing them to pass a quiz or test? If a close examination reveals that procedural rather than conceptual knowledge is being valued, what changes are needed to bring conceptual knowledge to the fore?

   Also, teachers need to be reminded that no value judgments can or should be made from this information—this simply provides a starting point for the discussion that can help focus efforts over the coming year.

4. Go through each comment and the related standards in order to discuss what you might say to a parent whose child has had a particular comment triggered. The comments were intentionally written in teacher/standards language, which will be foreign to some parents, and they will need some clarification. Be prepared to explain to parents how you intend to address their concerns in your teaching practices

   Teachers discuss the changes they intend to make as a result of the scores. For example, they recommend some adjustments to the curriculum by including more activities in geometry (e.g., investigations using computer software, to help students build conceptual knowledge.) Teachers point to those changes and identify that they either have been or will be made with the specific intent of helping the students in a particular area.

5. Meet regularly throughout the year to review their progress in teaching the standards, working with parents, etc.

   Teachers remind themselves that change does not occur overnight, that help is available, and then work hard to track progress over time.

This kind of strategy should help you make the best use of the instructional needs data, particularly in terms of helping understand the standards and what they can do to help students perform at even higher levels. We would encourage you to peruse the data carefully as they make decisions about how and what to teach.

We would also encourage you not to expect easy solutions, quick fixes, or step by step approaches that presume the test has been designed to solve problems—it has not. The DSTP was specifically designed to help identify student strengths and weaknesses, but working to enhance their strengths and to overcome their weaknesses is best placed in your hands as professionals who instruct students on a daily basis.

Finally, we would point out that the most **INAPPROPRIATE** thing that could be done with these instructional needs is to compare classrooms, either with each other or with a state or district reports. The classroom reports were designed to provide valid data at the classroom level only. The total test scores for the school provides the only valid point of comparison, either over time or within a given year.

Parent-Teacher Conference Materials

Several recently published documents may be of value to you when meeting with parents about the test scores of their children:

PTA Parent/Family Resource Guide

This guide is published by the Delaware PTA, and found in every school, community center, and library in Delaware. The guide can also be found on the web page of the Delaware PTA at: **www.delawarepta.org**. Particularly relevant sections of the handbook cover the following topics:

- Student learning
- Tips to motivate your children to do well in school
- Homework hints
- Help your child learn at home
- Making learning enjoyable
- Know your child's learning style
- Activities to help your child as a reader

The handbook is considered a public document; therefore, it can be downloaded and/or unlimited copies can be made of various sections for parent-teacher conferences.

Parent's Declaration of Responsibilities

This document is published by the Delaware PTA, and found in every school, community center, and library in Delaware. It can also be found on the web page of the Delaware PTA at: **www.delawarepta.org**. Provided is information on how the parent and family can get involved in the education of their children. Topics covered include:

- Communication: Parent/Family Responsibilities and School Responsibilities
- Parenting: Parent/Family Responsibilities and School Responsibilities
- Student Learning: Parent/Family Responsibilities and School Responsibilities
- Volunteering: Parent/Family Responsibilities and School Responsibilities
- School Decision Making and Advocacy: Parent/Family Responsibilities and School Responsibilities
    - Collaborating with the Community: Parent/Family Responsibilities and School Responsibilities

The document is considered a public document; therefore, it can be downloaded and/or unlimited copies can be made of various sections for parent-teacher conferences.

SECTION IV: UNDERSTANDING THE SCIENCE AND SOCIAL STUDIES REPORT

There are two sources of the score reports that are available:

- Individual, school, and district score reports produced by Harcourt Educational Measurement and sent to school administrators; and
- Individual and group score reports that can be produced by the new DSTP-OR secure system.

The reports produced by Harcourt Educational Measurement are automatically sent to your principal. Score reports can also be produced via the new DSTP-OR secure system. Depending on the policies in your school, you may request the reports through your principal or you may access the DSTP-OR system directly. The system is highly secure and is password protected. A password to use this system must be requested through your principal. To generate an classroom report, you must supply the name or the state-student ID for each student in each of your classes.

Reports Produced by Harcourt Educational Measurement

Individual student reports

The science and social studies individual student and school reports which parents and your principal receive have three sections of information on student performance:

1. Grade and testing date;
2. The science raw score and the social studies raw score for your **student** compared to other students at the same grade level in the school;
   The average science raw score and the average social studies raw score for the **school** (for students in the same grade as your student);
   The average science raw score and the average social studies raw score for the **district** (for students in the same grade as your student);
   The average science raw score and the average social studies raw score for the **State of Delaware** (for students in the same grade as your student); and
3. The student's points earned and percent of points earned for each area within the science test: inquiry, physical science, earth science, and life science; and the student's points earned and percent of points earned for each area within social studies: civics, economics, geography, and history.

School Summary Reports

1. Grade and testing date;
2. The average science and average social studies raw score for the **students** in your school compared to:
   - The **district** (for students in the **same grade** as your students);
   - The **State of Delaware** (for students in the **same grade** as your students); and
3. A summary of your school's points earned and percent of points earned for each area within the science test: inquiry, physical science, earth science, and life science; and your school's points earned and percent of points earned for each area within social studies: civics, economics, geography, and history; and

District summary reports

1. Grade and testing date;
2. The average science and social studies raw score for the **students** in your district compared to the **State of Delaware** (for students in the **same grade** as your students); and
3. A summary of your district's test performance analysis for science and social studies.

The science and social studies report has three sections of information on student performance, each section is discussed separately.

Grade and Testing Date

Like the English Language Arts and Mathematics Report, this part of the score report provides general information about the administration of the test:

- The grade level (04,06,08, or 11) of the student is reported next to **Grade.**
- The date the student took this test is then listed.

Unlike the reading and mathematics score report, there are no national standardized tests in science and social studies that match the Delaware content standards, thus no national norms are available. Performance levels are not yet available for science and social studies.

Score Comparisons of Grade Tested: Science and Social Studies

This section contains score comparisons of the student's science and social studies raw scores against all students who took the tests at the **same grade** level. The scale on the left is the science raw score. The scale on the right is the social studies raw score.

The individual student score

In this section you can see how well the student is performing in science and social studies by locating the position of the student's score on the scale. The student's score is the score on the line between the lowest raw score (0) and the maximum raw score (68). Remember that the student is being compared with other students at the **same grade** level in this school who took the test. You can also compare the student's performance to the performance of all same grade students in the district and in the state.

The school score

Also, you can see how all the students in your school are performing in science and in social studies compared to all the **same grade** students in the district or state by examining the position of the school's score on the scale. Remember that these scores reflect performance of students in the **same grade** as your student.

The district score

Also, you can see how all the students at your student's same grade level in your school district are performing in science and in social studies compared to all the same grade level Delaware students who took the test by examining the position of the district's score on the scale.

The state of Delaware score

In addition, you can see how all the students who took the science and social studies tests in the State of Delaware are performing by examining the position of the state's score on the scale. Remember that these scores reflect performance of all students at the **same grade** level as your student.

Test Performance Analysis

Science

This section provides feedback that reflects the number of items students answered correctly in each of the following areas of science: inquiry, physical science, earth science, and life science. Listed in the left-hand column is the number of points out of a total, and in the right-hand column is the percent of total points students scored in each area.

Social Studies

This section of the report provides feedback that depends on the number of items students answered correctly in each of the following areas of social studies: civics, economics, geography, and history. Listed in the left-hand column is the number of

points out of a total, and in the right-hand column is the percent of total points your students scored in each area.

Reports Generated by the DSTP- OR System

A DSTP-OR system report can be obtained through the Delaware DOE Web site. The site is **secure** and a password is required to access student information. **Contact your principal regarding the policy for requesting this secure information**. Teachers can obtain a password through approval of their principal to directly access student data (See Appendix C for instructions). The reports provide student score information for science, social studies, English language arts (reading and writing), and mathematics. There are several reports that may be of special interest to you as a classroom teacher:

1. List of test scores of selected students in your classroom or school; and
2. Summary of test scores of selected students in your classroom or school.

List of test scores of selected students

This list provides student score information regarding the performance of **EACH** of the students you request in science, social studies, reading, writing, and/or mathematics plus additional information such as district codes (District Te), school codes (School Te), gender, race, Title I reading (TIR), Title I math (TIM), special education (SPED), LEP status (LEP), Low-income (Low-Inco), and whether their score(s) can be aggregated (AGG). You will need to provide the exact names or the state-student ID numbers of the students in your class to retrieve information.

Score and performance information:

- Science raw score,
- Social studies raw score,
- Reading performance level for each student;
- Reading scaled score for the class;
- Reading percentile rank;
- Reading NCE score;
- Mathematics performance level;
- Mathematics scale score;Mathematics percentile rank;
- Mathematics NCE score;
- Writing performance level; and
- Writing raw score.

Each section of the Science and Social Studies test scores is discussed separately.

Science raw score

This section contains the science raw score for each of the students in your class. The students' science scores range from 0 to 68. Listed under "CONTENT AREA" on the report are the four sub-areas assessed by the science test: inquiry, physical science, earth science, and life science. For each of the sub-areas the number of points

earned out of a total number of points and the percent of total points is reported. Note that to compute the average percent over all sub-areas, summing the total points earned and dividing by 68 is the appropriate method to use. Do not average the **percent of total points** because you will **not get the correct answer**.

Social studies raw score

This section contains the social studies raw score for each of the students in your class. The students' social studies scores range from 0 to 68. Listed under "CONTENT AREA" on the report are the four sub-areas assessed by the social studies test: civics, economics, geography, and history. For each of the sub-areas the number of points earned out of a total number of points and the percent of total points is reported. Note that to compute the average percent over all sub-areas, summing the total points earned and dividing by 68 is the appropriate method to use. Do not average the **percent of total points** because you will **not get the correct answer**.

Summary of test scores of selected students

This report shows the grade level of the students selected, content area (reading, writing, mathematics, science and social studies), each type of score within each of these content areas, the number of students in your class, the mean score, standard deviation, and percent at each of the five performance levels for your class, your school, your district, and the state. Remember that all these scores are for students at the **same grade level** as your students. The data can also be disaggregated (separated out) by Gender, Race, Title I, Low-Income, LEP, and/or Special Education. Graphs are available to help you better understand the data. See Appendix C for an example of this report.

Using the Test Performance Analysis

The individual student score report lists the number of points earned and the percent of the total points a student received. The school, district and state reports lists the **mean (average) number of points** students earned rather that the percent of points earned.

Science

Every sub-area reported in the test performance analysis results is tied to one or more of the Delaware science standards. Inquiry in science is reflected in standard one of the science standards; physical science is reflected in standards two and three; earth science in standards four and five; and life science in standards six, seven, and eight. The test performance analysis indicates the number of possible points and percent of points (in the individual student score report) or average number of points (for the school, district, and state reports) earned in each of these sub-areas. This means that the lower the average number of points earned by students, the more likely it is that additional instruction in that area(s) of the standards will improve test scores.

Ideas for reflection

Following is a partial list of broadly stated questions that you and other teachers can ask and discuss as you reflect on the science test performance analysis. As no two

classrooms are exactly alike, it is our hope that these questions will begin to lead teachers to answers that are specific to the needs of their students.

- Are there areas that are not actually being taught?
- Are there areas of instruction that need more attention than they are currently receiving?
- When areas are presented, does the mode of instruction fit the desired outcomes?
- During instruction, do you ask for explanations and/or require students to provide evidence about the science concepts taught?
- Are students required to collect, organize, and analyze data?
- Do students need more experience applying concepts across earth, physical, and life sciences?
- Do you administer test questions in class similar to those on the DSTP? (See the item sampler for science on the DOE website.)

Utilizing the information

To best use the information we would recommend the steps below:

1. Meet with other teachers from a standards grouping (i.e., K-3, 4-5, 6-8, 9-12) to review the analyses. It is highly desirable that all teachers within a grade cluster participate in the discussions. The accountability system and the DSTP reflect the degree of success at reaching the standards, which are much broader and more comprehensive than a single grade level.
2. Discuss the kinds of practices, assignments, teaching strategies, etc. that the teachers are using, and whether or not those practices are in line with the standards and address the comments.
3. Work through the analyses with the groups of teachers, discussing strengths and areas for improvement. Teachers should be encouraged to move forward and to prioritize their efforts so they don't feel as if they have to do everything all at once. Be sure to talk about the kinds of activities that you feel would help students in the particular area(s) of the standards where they seem to need some help.
4. Go through each analyzed area and their related standards to discuss what you might say to a parent whose child has had a problem in that area. You should be prepared to explain to parents how they intend to address parental concerns in their teaching practices.
5. Meet regularly throughout the year to review progress in teaching the standards, working with parents, etc.

This kind of strategy should help you make the best use of the test performance analysis data, particularly in terms of helping understand the standards and what you can do to help students perform at even higher levels. We would encourage everyone to peruse the data carefully as they make decisions about how and what to teach. We would also encourage you not to expect easy solutions, quick fixes, or step by step approaches that presume the test has been designed to solve problems—it has not.

Social Studies

Every sub-area reported in the test performance analysis results is tied to the Delaware social studies standards. The sub-areas tested include civics, economics, geography, and history. The test performance analysis indicates the number of possible points and percent of points (in the individual student score report) or average number of points (for the school, district, and state reports) earned in each of these sub-areas. This means that the lower the average number of points earned by students, the more likely it is that additional instruction in that area(s) of the standards will improve test scores.

Ideas for reflection

Following is a partial list of broadly stated questions that you and other teachers can ask and discuss as you reflect on the social studies test performance analysis. As no two classrooms are exactly alike, it is our hope that these questions will begin to lead principals and teachers to answers that are specific to the needs of their students.

- Are there content areas that seem to require more attention than they are currently receiving?
- Are there content areas that could be integrated into social studies instruction?
- Does the mode of instruction fit the desired outcomes?
- Do your questions during instruction elicit higher-order thinking as reflected in the social studies standards?
- Are students required to think using social studies data, such as graphs, maps, charts, artifacts, and documents?
- Are students required to explain their work on tests and quizzes in writing or by drawing diagrams, graphs, or charts? Are rubrics used to score students responses?
- Do students need more experience applying concepts in context? Are problem contexts used to promote access for diverse learning?
- Do you administer tests that require application of knowledge?
- Do you administer test questions in class similar to those on the DSTP? (See the item sampler for social studies on the DOE website.)

Using the information

To best utilize the information we would recommend the steps below:

1. Meet with other teachers from a standards grouping (i.e., K-3, 4-5, 6-8, 9-12) to review the analyses. It is highly desirable that all teachers within a grade cluster participate in the discussions. The accountability system and the DSTP reflect the degree of success at reaching the standards, which are much broader and more comprehensive than a single grade level.

2. Discuss the kinds of practices, assignments, teaching strategies, etc. that the teachers are using, and whether or not those practices are in line with the standards and address the comments.
3. Work through the analyses with the groups of teachers, discussing strengths and areas for improvement. Teachers should be encouraged to move forward and to prioritize their efforts so they don't feel as if they have to do everything all at once. Be sure to talk about the kinds of activities that teachers feel would help students in the particular area(s) of the standards where they seem to need some help.
4. Go through each analyzed area and their related standards to discuss what you might say to a parent whose child has had a problem in that area. You should be prepared to explain to parents how they intend to address parental concerns in their teaching practices.
5. Meet regularly throughout the year to review progress in teaching the standards, working with parents, etc.

This kind of strategy should help you make the best use of the test performance analysis data, particularly in terms of helping understand the standards and what you can do to help students perform at even higher levels. We would encourage everyone to peruse the data carefully as they make decisions about how and what to teach. We would also encourage you not to expect easy solutions, quick fixes, or step by step approaches that presume the test has been designed to solve problems—it has not.

Parent-Teacher Conference Materials

Several recently published documents may be of value to you when meeting with parents about the test scores of their sons or daughters:

PTA Parent/Family Resource Guide

This guide is published by the Delaware PTA, and found in every school, community center, and library in Delaware. The guide can also be found on the web page of the Delaware PTA at: **www.delawarepta.org**. Particularly relevant sections of the handbook cover the following topics:

- Student learning
- Tips to motivate your children to do well in school
- Homework hints
- Help your child learn at home
- Making learning enjoyable
- Know your child's learning style
- Activities to help your child as a reader

The handbook is considered a public document; therefore, it can be downloaded or unlimited copies can be made of various sections for parent-teacher conferences.

Parent's Declaration of Responsibilities

This document is published by the Delaware PTA, and found in every school, community center, and library in Delaware. It can also be found on the web page of the Delaware PTA at: **www.delawarepta.org**. Provided is information on how the parent and family can get involved in the education of their children. Topics covered include:

- Communication: Parent/Family Responsibilities and School Responsibilities
- Parenting: Parent/Family Responsibilities and School Responsibilities
- Student Learning: Parent/Family Responsibilities and School Responsibilities
- Volunteering: Parent/Family Responsibilities and School Responsibilities
- School Decision Making and Advocacy: Parent/Family Responsibilities and School Responsibilities
- Collaborating with the Community: Parent/Family Responsibilities and School Responsibilities

The document is considered a public document; therefore, it can be downloaded and/or unlimited copies can be made of various sections for parent-teacher conferences.

APPENDIX A: SAMPLE REPORTS FROM HARCOURT EDUCATIONAL MEASUREMENT

Following are samples of the various reports from the 2000 administration of the DSTP. These reports **do not contain real data**. The reports included are:

A1. English Language Arts Individual Report (Reading and Writing)

A2. Mathematics Individual Report

A3. Science and Social Studies Individual Report

A4. English Language Arts School Summary Report (Reading and Writing)

A5. Mathematics School Summary Report

A6. English Language Arts District Summary Report (Reading and Writing)

A7. Mathematics District Summary Report

A8. English Language Arts State of Delaware Summary Report (Reading and Writing)

A9. Mathematics Summary Report for the State of Delaware

A1. English Language Arts Individual Report (Reading and Writing)

2000 DELAWARE STUDENT TESTING PROGRAM
English Language Arts Individual Report for

Student ID#:

SCHOOL:
DISTRICT:

GRADE: 05
TEST DATE: 04/03/00
SAT9 LEVEL/FORM: 12/T
SAT9 NORMS: 1995 ES

PERFORMANCE LEVELS

This test is designed to measure your child's progress in terms of the Delaware Content Standards. The Reading and Writing performance of this student falls into one of the five levels.

Performance Levels are:	Reading Level and score	Writing Level and score
Distinguished		
Exceeds the standard		
Meets the standard		✓ 8.00
Below the standard	✓ 444	
Well below the standard		

SCORE COMPARISONS OF GRADE TESTED

	Reading		Writing	
Student	444	175 ... 700	8.00	3 ... 15
School	464	175 ... 700	6.62	3 ... 15
District	464	175 ... 700	6.62	3 ... 15
State	470	175 ... 700	6.78	3 ... 15

Certain items on the Reading part of the test were administered to a national sample of students. The percentile below represents how your child performed on those items compared to other students in the same grade throughout the country.

1 ... 38 ... 99

INSTRUCTIONAL NEEDS

To achieve a higher level in READING, your child should work on:

- *providing enough details from the text to answer open-ended questions.*
- *reading more carefully to retell or restate information from the text.*
- *understanding the central ideas in a text.*
- *using information to make interpretations.*
- *drawing conclusions and using critical thinking to connect and synthesize information within and across text, ideas, and concepts.*
- *using text to formulate, express, and support opinions.*

To achieve a higher level in WRITING, your child should work on:

- *organizing the writing around a single topic with an introduction, closing, and some transitions.*
- *working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding.*
- *supporting the ideas with more specific details.*
- *doing more than making generalities regarding the prompt.*

Please see your child's teacher for more information.

COPY 01

Process No.: 10060226-1651308-2001-03596-1
35776

A2. Mathematics Individual Report

2000 DELAWARE STUDENT TESTING PROGRAM
Mathematics Individual Report for

Student ID#:

SCHOOL:
DISTRICT:

GRADE: 05
TEST DATE: 04/03/00
SAT9 LEVEL/FORM: 12/T
SAT9 NORMS: 1995 US

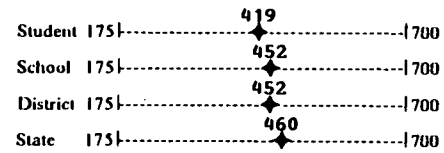
PERFORMANCE LEVELS

This test is designed to measure your child's progress in terms of the Delaware Content Standards. The Mathematics performance of this student falls into one of the five levels.

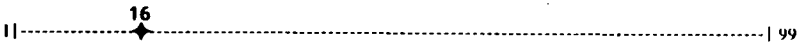
Performance Levels are:	Mathematics Level and score
Distinguished	
Exceeds the standard	
Meets the standard	
Below the standard	
Well Below the standard	✓ 419

SCORE COMPARISONS OF GRADE TESTED

Mathematics



Certain items on the Mathematics part of the test were administered to a national sample of students. The percentile below represents how your child performed on those items compared to other students in the same grade throughout the country.



INSTRUCTIONAL NEEDS

To achieve a higher level in MATHEMATICS, your child should work on:

Number Concepts
- *using computation or estimation strategies with understanding.*
- *using the concept of relative size of numbers.*
- *modeling fractions and decimals with situations and pictures.*
- *using estimation skills to approximate an answer.*

Patterns, Algebra, and Functions
- *using algebraic reasoning.*
- *recognizing and extending a variety of patterns.*

Geometry
- *recognizing and transforming geometric figures.*
- *analyzing properties of simple geometric figures.*

Probability and Statistics
- *determining the likelihood of simple events.*
- *calculating and using the mean (average) of a set of values in a meaningful context.*

Reasoning and Communication
- *using mathematical reasoning to solve multi-step problems.*
- *communicating mathematical arguments.*

COPY 01

Please see your child's teacher for more information.

Process No.: 10060226-1651308-2001-03597-1
35776

2000 DELAWARE STUDENT TESTING PROGRAM
Science & Social Studies Individual Report for

JOHN DOE
Student ID#: 000000

SCHOOL: SPRINGFIELD MIDDLE - 000
DISTRICT: SPRINGFIELD - 00

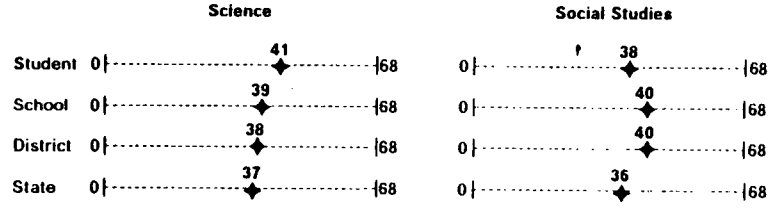
GRADE: 08
TEST DATE: 05/09/00

PERFORMANCE LEVELS

This test is designed to measure your child's progress in terms of the Delaware Content Standards. The Science and Social Studies performance of this student falls into one of five levels.

Performance Levels are:	Science level and score	Social Studies level and score
Distinguished		
Exceeds the standard	**NOT YET AVAILABLE**	
Meets the standard		
Below the standard		
Well Below the standard		

COMPARISONS OF TOTAL POINTS EARNED



CONTENT AREAS

SCIENCE	Points Earned	Percent of Total Points
Inquiry	5 out of 11 points	45
Physical Science	11 out of 19 points	58
Earth Science	9 out of 16 points	56
Life Science	16 out of 22 points	73

SOCIAL STUDIES	Points Earned	Percent of Total Points
Civics	8 out of 17 points	47
Economics	10 out of 17 points	59
Geography	11 out of 17 points	65
History	9 out of 17 points	53

COPY XX

Process No. 00000000 0000000 0000 0SESO 0 00000

Please see your child's teacher for more information.

A4. English Language Arts School Summary Report (Reading and Writing)

2000 DELAWARE STUDENT TESTING PROGRAM
English Language Arts Summary Report for

School Code:

DISTRICT:

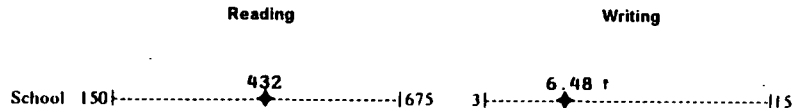
GRADE: 03
TEST DATE: 04/03/00
SAT9 LEVEL/FORM: P3/F
SAT9 NORMS: 1995 ES

PERFORMANCE LEVELS

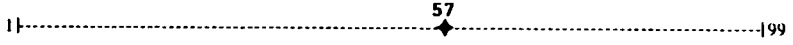
This test is designed to measure students' progress in terms of the Delaware Content Standards. The number and percent of students in this grade at each of the five Performance Levels for this group is reported below.

Performance Levels are:	Reading Level N	Reading Level %	Writing Level N	Writing Level %
Distinguished	13	10	0	0
Exceeds the standard	12	9	2	2
Meets the standard	72	53	55	43
Below the standard	28	21	64	50
Well Below the standard	11	8	7	5

SCORE COMPARISONS OF GRADE TESTED



Certain items on the Reading part of the test were administered to a national sample of students. The percentile below represents how the typical student in the group performed on those items compared to other students in the same grade throughout the country.



INSTRUCTIONAL NEEDS

READING:

N	%	
131	96	▪ *providing enough details from the text to answer open-ended questions*
89	65	▪ *reading more carefully to retell or restate information from the text*
87	64	▪ *using strategies to understand the text*
77	57	▪ *understanding the central ideas in a text*
96	71	▪ *drawing conclusions and using critical thinking to connect and synthesize information within and across text, ideas, and concepts*
123	90	▪ *making, supporting, and extending inferences about contents, events, characters, setting, theme, and style*
0	0	▪ *continuing use of good reading strategies. Congratulations!*

WRITING:

N	%	
71	55	▪ *organizing the writing around a single topic or central idea* ▪ *writing in complete sentences with a variety of length and structure* ▪ *working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding* ▪ *doing more than restating the prompt*
51	40	▪ *organizing the writing around a single topic with an introduction, closing, and some transitions* ▪ *working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding* ▪ *supporting the ideas with more specific details* ▪ *doing more than making generalities regarding the prompt*
6	5	▪ *using an effective introduction and closing* ▪ *writing in a consistent style with precise, vivid word choice* ▪ *writing with a clear, logical progression of ideas using smooth transitions* ▪ *including relevant details that are fully elaborated*
0	0	*Congratulations on an excellent performance on at least one of the two writing prompts. The comments below are to encourage the student to strive for excellence by* ▪ *continuing to write using distinctive voice and style* ▪ *showing an exceptional awareness of readers' needs*

COPY 01

2000 DELAWARE STUDENT TESTING PROGRAM
Mathematics Summary Report for

School Code:

DISTRICT: WOODBRIDGE - 35

GRADE: 03
TEST DATE: 04/03/00
SAT9 LEVEL/FORM: P3/F
SAT9 NORMS: 1995 ES

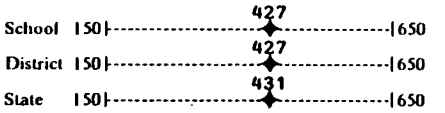
PERFORMANCE LEVELS

This test is designed to measure students' progress in terms of the Delaware Content Standards. The number and percent of students in this grade at each of the five Performance Levels for this group is reported below.

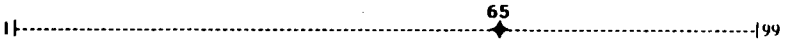
Performance Levels are:	Mathematics Level N	%
Distinguished	5	4
Exceeds the standard	17	13
Meets the standard	76	56
Below the standard	26	19
Well Below the standard	12	9

SCORE COMPARISONS OF GRADE TESTED

Mathematics



Certain items on the Mathematics part of the test were administered to a national sample of students. The percentile below represents how the typical student in the group performed on those items compared to other students in the same grade throughout the country.



INSTRUCTIONAL NEEDS

MATHEMATICS:

N	%		
			Number Concepts
75	55	▪	*measuring*
65	48	▪	*using computation strategies with understanding*
48	35	▪	*using estimation skills to approximate an answer*
20	15	▪	*using the concept of place value*
25	18	▪	*using fractions to represent part of a whole*
			Patterns, Algebra, and Functions
12	9	▪	*using basic number properties such as even/odd, reversibility of multiplication, etc*
55	40	▪	*recognizing and extending a variety of patterns*
			Geometry
22	16	▪	*recognizing and transforming geometric figures*
54	40	▪	*analyzing properties of simple geometric figures*

N	%		
			Probability and Statistics
44	32	▪	*constructing, reading, and interpreting simple graphs*
4	3	▪	*determining the likelihood of simple events*
			Reasoning and Communication
43	32	▪	*using mathematical reasoning to solve multi-step problems*
53	39	▪	*communicating mathematical arguments*

COPY 01

Process No.: 10060226-165130B-2001-02325-1

A6. English Language Arts District Summary Report (Reading and Writing)

2000 DELAWARE STUDENT TESTING PROGRAM
English Language Arts Summary Report for

District Code:

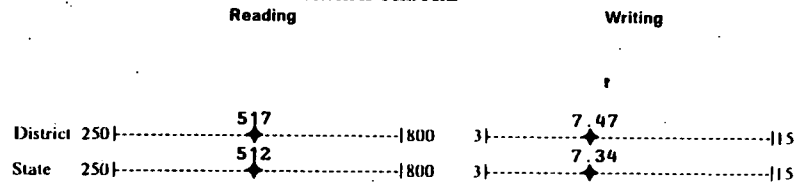
GRADE: 10
TEST DATE: 04/03/00
SAT9 LEVEL/FORM: T2/F
SAT9 NORMS: 1995 ES

PERFORMANCE LEVELS

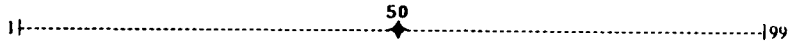
This test is designed to measure students' progress in terms of the Delaware Content Standards. The number and percent of students in this grade at each of the five Performance Levels for this group is reported below.

Performance Levels are:	Reading Level N	Reading Level %	Writing Level N	Writing Level %
Distinguished	1	0	0	0
Exceeds the standard	5	2	1	0
Meets the standard	169	67	132	54
Below the standard	52	21	94	38
Well Below the standard	24	10	18	7

SCORE COMPARISONS OF GRADE TESTED



Certain items on the Reading part of the test were administered to a national sample of students. The percentile below represents how the typical student in the group performed on those items compared to other students in the same grade throughout the country.



INSTRUCTIONAL NEEDS

READING:

N	%	
218	87	▪ *providing enough details from the text to answer open-ended questions*
57	23	▪ *reading more carefully to retell or restate information from the text*
108	43	▪ *using strategies to understand the text*
118	47	▪ *understanding the central ideas in a text*
156	62	▪ *using information to make interpretations*
94	37	▪ *drawing conclusions and using critical thinking to connect and synthesize information within and across text, ideas, and concepts*
208	83	▪ *understanding the effects of author's techniques and decisions*
208	83	▪ *using text to formulate, express, and support opinions*
88	35	▪ *making, supporting, and extending inferences about contents, events, characters, setting, theme, and style*
2	1	▪ *continuing use of good reading strategies. Congratulations!*

WRITING:

N	%	
68	24	▪ *organizing the writing around a single topic or central idea* ▪ *writing in complete sentences with a variety of length and structure* ▪ *working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding* ▪ *doing more than restating the prompt*
167	68	▪ *organizing the writing around a single topic with an introduction, closing, and some transitions* ▪ *working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding* ▪ *supporting the ideas with more specific details* ▪ *doing more than making generalities regarding the prompt*
18	7	▪ *using an effective introduction and closing* ▪ *writing in a consistent style with precise, vivid word choice* ▪ *writing with a clear, logical progression of ideas using smooth transitions* ▪ *including relevant details that are fully elaborated*
0	0	*Congratulations on an excellent performance on at least one of the two writing prompts. The comments below are to encourage the student to strive for excellence by* ▪ *continuing to write using distinctive voice and style* ▪ *showing an exceptional awareness of readers' needs*

COPY 02

Process No.: 10060220-1651308-2001-00003-2

2000 DELAWARE STUDENT TESTING PROGRAM
Mathematics Summary Report for

District Code:

GRADE: 10
TEST DATE: 04/03/00
SAT9 LEVEL/FORM: T2/T
SAT9 NORMS: 1995 ES

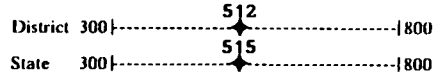
PERFORMANCE LEVELS

This test is designed to measure students' progress in terms of the Delaware Content Standards. The number and percent of students in this grade at each of the five Performance Levels for this group is reported below.

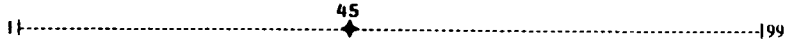
Performance Levels are:	Mathematics Level N	%
Distinguished	8	3
Exceeds the standard	9	4
Meets the standard	66	26
Below the standard	76	30
Well Below the standard	91	36

SCORE COMPARISONS OF GRADE TESTED

Mathematics



Certain items on the Mathematics part of the test were administered to a national sample of students. The percentile below represents how the typical student in the group performed on those items compared to other students in the same grade throughout the country.



INSTRUCTIONAL NEEDS

MATHEMATICS:

N	%		
		Number Concepts	
128	51	▪	*using mathematical operations, including those involving exponents, roots, and matrices with understanding*
207	83	▪	*finding the area of regions or volumes of space shapes*
		Patterns, Algebra, and Functions	
184	74	▪	*using algebra to describe and analyze situations*
179	72	▪	*constructing and interpreting graphs*
156	62	▪	*solving equations and inequalities*
		Geometry	
235	94	▪	*analyzing and applying properties of geometric figures*
123	49	▪	*coordinate geometry*
155	62	▪	*applying right triangle relationships*

N	%		
		Probability and Statistics	
168	67	▪	*determining the probability of events*
162	65	▪	*analyzing data and graphs*
		Reasoning and Communication	
221	88	▪	*using mathematical reasoning to solve multi-step problems*
200	80	▪	*communicating mathematical arguments*

COPY 02

Process No.: 10060220-1651108-2001-00004-2

A8. English Language Arts State of Delaware Summary Report (Reading and Writing)

2000 DELAWARE STUDENT TESTING PROGRAM
English Language Arts Summary Report for
DELAWARE

GRADE:	03
TEST DATE:	04/03/00
SAT9 LEVEL/FORM:	P3/T
SAT9 NORMS:	1995 ES

PERFORMANCE LEVELS

This test is designed to measure students' progress in terms of the Delaware Content Standards. The number and percent of students in this grade at each of the five Performance Levels for this group is reported below.

Performance Levels are:	Reading Level N	Reading Level %	Writing Level N	Writing Level %
Distinguished	976	12	5	0
Exceeds the standard	936	12	43	1
Meets the standard	4,148	53	2,723	36
Below the standard	1,014	13	3,674	49
Well Below the standard	817	10	1,073	14

SCORE COMPARISONS OF GRADE TESTED

	Reading	Writing
State	150 — 437 — 675	3 — 6.06 — 15

Certain items on the Reading part of the test were administered to a national sample of students. The percentile below represents how the typical student in the group performed on those items compared to other students in the same grade throughout the country.

1 — 62 — 99

INSTRUCTIONAL NEEDS

READING:

N	%	
7715	98	• *providing enough details from the text to answer open-ended questions*
4450	56	• *reading more carefully to retell or restate information from the text*
4931	62	• *using strategies to understand the text*
3751	48	• *understanding the central ideas in a text*
4806	61	• *drawing conclusions and using critical thinking to connect and synthesize information within and across text, ideas, and concepts*
6740	85	• *making, supporting, and extending inferences about contents, events, characters, setting, theme, and style*
0	0	• *continuing use of good reading strategies. Congratulations!*

WRITING:

N	%	
4747	63	• *organizing the writing around a single topic or central idea* • *writing in complete sentences with a variety of length and structure* • *working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding* • *doing more than restating the prompt*
2607	35	• *organizing the writing around a single topic with an introduction, closing, and some transitions* • *working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding* • *supporting the ideas with more specific details* • *doing more than making generalities regarding the prompt*
159	2	• *using an effective introduction and closing* • *writing in a consistent style with precise, vivid word choice* • *writing with a clear, logical progression of ideas using smooth transitions* • *including relevant details that are fully elaborated*
5	0	*Congratulations on an excellent performance on at least one of the two writing prompts. The comments below are to encourage the student to strive for excellence by* • *continuing to write using distinctive voice and style* • *showing an exceptional awareness of readers' needs*

COPY 03

Process No: 12345678 1651055-PILT-00013-3

2000 DELAWARE STUDENT TESTING PROGRAM
Mathematics Summary Report for
DELAWARE

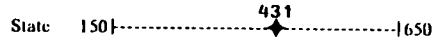
GRADE: 03
TEST DATE: 04/03/00
SAT9 LEVEL/FORM: P3/T
SAT9 NORMS: 1995 ES

PERFORMANCE LEVELS

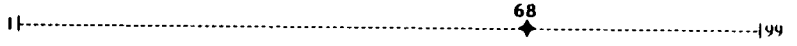
This test is designed to measure students' progress in terms of the Delaware Content Standards. The number and percent of students in this grade at each of the five Performance Levels for this group is reported below.

Performance Levels are:	Mathematics Level N	%
Distinguished	428	5
Exceeds the standard	1,213	15
Meets the standard	4,102	52
Below the standard	1,328	17
Well Below the standard	825	10

SCORE COMPARISONS OF GRADE TESTED
Mathematics



Certain items on the Mathematics part of the test were administered to a national sample of students. The percentile below represents how the typical student in the group performed on those items compared to other students in the same grade throughout the country.



INSTRUCTIONAL NEEDS

MATHEMATICS:

N	%	
		Number Concepts
3988	51	▪ *measuring*
3139	40	▪ *using computation strategies with understanding*
2911	37	▪ *using estimation skills to approximate an answer*
1258	16	▪ *using the concept of place value*
1533	19	▪ *using fractions to represent part of a whole*
		Patterns, Algebra, and Functions
1019	13	▪ *using basic number properties such as even/odd, reversibility of multiplication, etc*
2171	27	▪ *recognizing and extending a variety of patterns*
		Geometry
1105	14	▪ *recognizing and transforming geometric figures*
3006	38	▪ *analyzing properties of simple geometric figures*
		Probability and Statistics
2168	27	▪ *constructing, reading, and interpreting simple graphs*
589	7	▪ *determining the likelihood of simple events*
		Reasoning and Communication
2272	29	▪ *using mathematical reasoning to solve multi-step problems*
3222	41	▪ *communicating mathematical arguments*

 COPY 01

Process No.: 1243678-1651033 PILT 00014-1

APPENDIX B: SAMPLE OF ITEMS FOR EACH PART OF THE DSTP

B1. Reading Comprehension, Grade 8

B2. Writing, Grades 3, 5, 8, and 10

B3. Mathematics, Grades 3, 5, 8, and 10

B4. Science, Grades 8, and 11

B5. Social Studies, Grades 4, 6, 8, and 11

B1. Reading Comprehension, Grade 8

Literary Passage: Grade 8

In Japan, many stories are told about Ooka, a judge who once lived in Tokyo. Read the story about one of Ooka's cases and answer the questions that follow.

Ooka and the Stolen Smell

Now it so happened in the days of old Yedo, as Tokyo was once called, that the storytellers told marvelous tales of the wit and wisdom of His Honorable Honor, Ooka Tadasuke, Echizen-no-Kami.

This famous judge never refused to hear a complaint, even if it seemed strange or unreasonable. People sometimes came to his court with the most unusual cases, but Ooka always agreed to listen. And the strangest case of all was the famous Case of the Stolen Smell.

It all began when a poor student rented a room over a *tempura* shop — a shop where fried food could be bought. The student was a most likable young man, but the shopkeeper was a miser who suspected everyone of trying to get the better of him. One day he heard the student talking with one of his friends.

"It is sad to be so poor that one can only afford to eat plain rice," the friend complained.

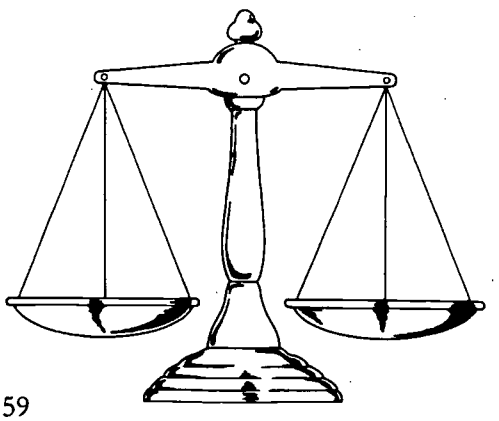
"Oh," said the student, "I have found a very satisfactory answer to the problem. I eat my rice each day while the shopkeeper downstairs fries his fish. The smell comes up, and my humble rice seems to have much more flavor. It is really the smell, you know, that makes things taste so good."

The shopkeeper was furious. To think that someone was enjoying the smell of his fish for nothing! "Thief!" he shouted. "I demand that you pay me for the smells you have stolen."

"A smell is a smell," the young man replied. "Anyone can smell what he wants to. I will pay you nothing!"

Scarlet with rage, the shopkeeper rushed to Ooka's court and charged the student with theft. Of course, everyone laughed at him, for how could anyone steal a smell? Ooka would surely send the man about his business. But to everyone's astonishment, the judge agreed to hear the case.

"Every man is entitled to his hour in court," he explained. "If this man feels strongly enough about his smells to make a complaint, it is only right that I, as city magistrate, should hear the case." He frowned at the amused spectators.



Gravely Ooka sat on the dais and heard the evidence. Then he delivered his verdict.

"The student is obviously guilty," he said severely. "Taking another person's property is theft, and I cannot see that a smell is different from any other property."

The shopkeeper was delighted, but the student was horrified. He was very poor, and he owed the shopkeeper for three months' smelling. He would surely be thrown into prison.

"How much money have you?" Ooka asked him.

"Only five *mon*, Honorable Honor," the boy replied. "I need that to pay my rent or I will be thrown out into the street."

"Let me see the money," said the judge.

The young man held out his hand. Ooka nodded and told him to drop the coins from one hand to the other.

The judge listened to the pleasant clink of the money and said to the shopkeeper, "You have now been paid. If you have any other complaints in the future, please bring them to the court. It is our wish that all injustices be punished and all virtue rewarded."

"But, most Honorable Honor," the shopkeeper protested, "I did not get the money! The thief dropped it from one hand to the other. See! I have nothing." He held up his empty hands to show the judge.

Ooka stared at him gravely. "It is the court's judgment that the punishment should fit the crime. I have decided that the price of the *smell* of food shall be the *sound* of money. Justice has prevailed as usual in my court."

Multiple Choice: Grade 8

Interpreting Meaning Stance

Item:

The author's purpose in writing this story was probably to —

a. teach a lesson
b. persuade with facts
c. describe a system
d. explain a process

Answer: a

Short Answer: Grade 8

Interpreting Meaning Stance

Item:

What is the most likely reason that the author describes the shopkeeper as a miser?

Scoring Rubric:

2	Response is a complete and accurate explanation of the author's description.
1	Response is an incomplete or only partially accurate explanation of the author's description.
0	Response is totally inappropriate or inaccurate.

NOTE: Score point 2 responses reference text support (doesn't want to give anything away, suspicious of everyone) for the description.

Extended Response: Grade 8

Extending Meaning Stance

Item:

How is Ooka's behavior during the trial contradicted by the verdict he gives? Use details from the story to support your answer.

Scoring Rubric:

4	Response demonstrates a complete and thorough understanding of the irony of the situation, citing relevant and sufficient details from the selections as support.
3	Response demonstrates an adequate understanding of the irony of the situation, citing some relevant details from the selection as support.
2	Response demonstrates a limited understanding of the irony of the situation, citing very few relevant details from the selection as support.
1	Response attempts to explain the irony of the situation but demonstrates serious misconceptions, citing few or no details from the selection as support.
0	Response is totally inappropriate or inaccurate.

NOTE: Score point 4 responses reference the contrast between Ooka's serious demeanor during the trial (frowns at amused spectators, listens gravely, speaks severely, stares gravely, etc.) and the humor of Ooka's verdict (the *sound* of money is payment for the *smell* of food).

Text-Based Writing Item: Grade 8

Extending Meaning Stance

Item:

At the end of the story, Ooka states, "It is the court's judgment that the punishment should fit the crime." Write an essay explaining whether or not you feel that the punishment in the case does fit the crime. Use details from the story to support your opinion.

Scoring Rubric:

4	Response takes a clear stance and demonstrates a complete and thorough understanding of the text, citing relevant and sufficient details from the selections as support.
3	Response takes a stance and demonstrates an adequate understanding of the text, citing some relevant details from the selection as support.
2	Response suggests a stance and demonstrates a limited understanding of the text, citing very few relevant details from the selection as support.
1	Response attempts to take a stance but demonstrates serious misconceptions about the text, citing few or no details from the selection as support.
0	Response is totally inappropriate or inaccurate.

NOTE: Score point 4 responses take a clear stance and support the stance with details from the text (it fits – the shopkeeper is really losing nothing so the student is really paying nothing, OR it doesn't fit – there shouldn't have been a trial since there really was no real wrong done and it was unfair to make the student go through a trial).

B2. Writing, Grades 3, 5, 8 and 10

Writing: Grade 3

DIRECTIONS

Read the writing prompt in the box below.

Writing Prompt
You have received some money as a gift. Your family says you may spend the money after they have approved your idea. Decide how you want to spend the money. Write a letter to your family to persuade them to approve your idea.

Thinking about the following will help you focus and plan your writing.

- **What are some ideas you have for spending the money?**
- **After thinking about these ideas, what *one* idea are you suggesting?**
- **Why is your idea a good one?**
- **Why might your family not like your idea?**
- **How can you convince them to approve your idea?**

Writing: Grade 5

Directions:

Read the writing prompt in the box below.

Writing Prompt
You have received some money as a gift. Your family says you may spend the money after they have approved your idea. Decide how you want to spend the money. Write a letter to your family to persuade them to approve your idea.

Thinking about the following will help you focus and plan your writing.

- **What are some ideas you have for spending the money?**
- **After thinking about these ideas, what *one* idea are you suggesting?**
- **Why is your idea a good one?**
- **Why might your family not like your idea?**
- **How can you convince them to approve your idea?**

DIRECTIONS

Read the writing prompt in the box below.

Writing Prompt
Your class has decided to bury a time capsule that teenagers will open in the year 2098. (A time capsule is a container which is placed in the ground and opened sometime in the future.) You plan to contribute one item that represents teenage life in 1998. Write a letter to the teens of 2098 stating what your item is and explaining what this item tells about teenage life in 1998.

Thinking about the following will help you focus and plan your writing.

- **What one item did you choose?**
- **Why did you choose this item?**
- **Why is the item important to teenagers today?**

Writing: Grade 10

DIRECTIONS

Read the writing prompt in the box below.

Writing Prompt
The county owns some land that it wants to use to benefit the community. What would you advise the county to do with this land? Write a letter to county officials suggesting how the land might be used.

Thinking about the following will help you focus and plan your writing.

- **What are some possible uses for the land?**
- **After thinking about these uses, what *one* use of the land are you suggesting?**
- **What might be some advantages associated with this use?**
- **What might be some disadvantages?**
- **Why is your suggestion a good use of the land?**
- **Why would your proposal be beneficial for the entire community?**

B3. Mathematics, Grades 3, 5, 8, and 10

Short Answer Item: Grade 3

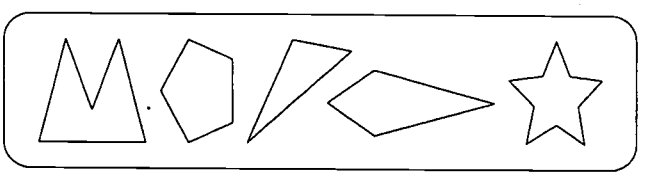
Grade 3 — Short Constructed Response

Standard Measured:

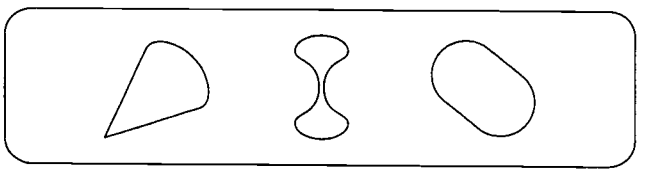
Standard 8: Students will develop SPATIAL SENSE and an understanding of GEOMETRY by solving problems in which there is a need to recognize, construct, transform, analyze properties of, and discover relationships between, geometric figures.

Item:

The five figures in the box below are polygons.



The three figures in the box below are not polygons.



Decide which of the figures below are polygons. Put a ring around any of the figures that are polygons.

Scoring Rubric:

2	Response identifies both figures that are polygons, A & C, and none that aren't (neither B nor D).
1	Identifies one of the correct figures, i.e., either A or C and no extraneous figures; or identifies both A and C *and* either B or D as polygons.
0	Fails to identify either A or C or identifies one of them and either B or D or both.

Commentary:

This item challenges students to understand relationships between geometric plane figures which are polygons. It does not assume that students will know what polygons are but defines them visually as closed figures comprised of straight line segments. Students must contrast polygons with non-polygons and infer this defining feature from that comparison.

Multiple Choice Item: Grade 5

Grade 5 Multiple Choice

Standard Measured:

Standard 9: Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.

Item:

Amy flips a quarter and it lands heads up. When she flips it again it will —

a. probably be tails
b. probably be heads
c. definitely be tails
d. have an equal chance of being heads or tails

Answer: d

Commentary:

A fundamental idea necessary for understanding probability is that of the simple random event. Coin flipping is perhaps the most common example of an equally likely event. Children have experience of random outcomes from the flipping of fair coins and should begin to build upon this experience to understand that subsequent coin flips are independent one from another.

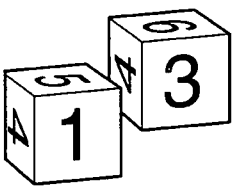
Grade 8 Extended Constructed Response

Standard Measured:

Standard 9: Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.

Item:

You and a friend are playing a game with number cubes. You roll 2 number cubes (with faces numbered 1 through 6) and find the product of the two numbers. If the product is even, you win, and if the product is odd, your friend wins.



If you roll the number cubes just once, who has the better chance of winning? Justify your answer mathematically (Hint: think about all possible outcomes).

Scoring Rubric:

4 In order to receive a score of 4, an answer must demonstrate a quantification of the sample space. This might be done by drawing a 6x6 grid and discovering that 27 of the 36 products (75%) are even. It might also be accomplished by noting that an odd number times an odd number is odd, but odd times even, even times even, and even times odd give even products (i.e., 75% of all products are even). Therefore, *you* have a better chance of winning.

3 A correct conclusion is reached but the quantification is not as fully realized as that suggested above. Perhaps 5 or 6 examples of products are given in a systematic way with even products outnumbering odd, i.e., reasoning is derived from an ordered subset of outcomes.

2 Only a few examples are given upon which a conclusion (perhaps correct, perhaps not) is based.

1 An answer is given without much evidence of any exploration of possible outcomes.

0 Blank/no response.

Commentary:

This item requires that students consider the entire sample space of possible outcomes and recognize that each of these outcomes is equally likely. Many students will have had instructional experience with problems involving the *sum* of two dice so this would involve a slight extension from a familiar situation. Some students may even find a more efficient solution strategy than enumerating the entire sample space by considering the characteristics of the products of even and odd numbers.

Grade 10 Extended Constructed Response

Standard Measured:

Standard 10: Students will develop an understanding of PATTERNS, RELATIONSHIPS, AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model, and describe real-world functional relationships.

Item:

The table below shows *thinking, braking,* and *stopping* distances at different highway speeds.

Speed (mph)	Thinking Distance (ft)	Braking Distance (ft)	Stopping Distance (ft)
v		$\frac{v^2}{20}$	
10	10	5	15
20	20	20	40
30	30	45	75
40	40	80	120
50	50	125	175
60	60	180	240

For the values in the table, if speed is represented by v, then a formula for the braking distance would be $\frac{v^2}{20}$.

a. What formulas would represent *thinking distance* and *stopping distance*?

b. According to the formula, how many feet would it take to stop if a car is traveling 55 mph?

c. The usual rule is to allow one car length (approximately 20 feet) of space between your car and a car in front for every 10 mph of speed. How good is the rule when compared to the data above? Explain your reasoning.

Scoring Rubric:

4 Correct answers to all parts.
   a. Thinking distance is v;
      Stopping distance is $v + \frac{v^2}{20}$ or $\frac{20v + v^2}{20}$
   b. 206.25 (feet)
   c. Explanation which indicates that the customary rule works for low speeds (through 20 mph) but fails to provide enough stopping distance at higher speeds. This is because the rule is linear but stopping distance is quadratic. (Student needn't use the terms linear and quadratic but should note that the rule fails for speeds above 20 mph).

3 Parts a. and b. answered correctly, but explanation in c. does not contain enough detail, i.e., doesn't identify 20 mph as the maximum speed for which the conventional rule works.

2 Parts a. and b. answered correctly, with, perhaps, minor computational errors in b. Response to c. inadequate or even missing.

1 Unable to write formula for stopping distance though perhaps able to approximate stopping distance at 55 mph through linear interpolation from tabular values.

0 Some work but without much evidence that this work addresses the question.

Commentary:

A primary goal of high school mathematics is to promote the development of a variety of ways of modeling the world. This item features a quadratic model in a context that is important for young adults, that of the stopping distance of an automobile. The item involves scaffolding to promote access to the algebraic representation and then proceeds to require interpretation of the mathematical results.

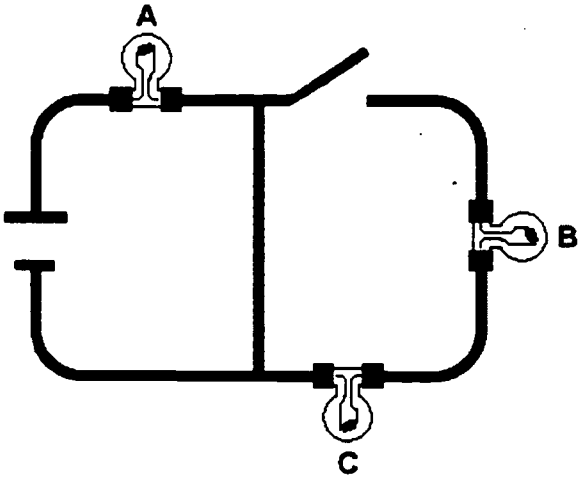
B4. Science, Grades 8 and 11

Multiple Choice Item: Grade 8

Energy and Its Effects – Forms/Sources of Energy (Middle School)

Electrical systems can be designed to perform a variety of tasks, using series, parallel, or combination circuits.

Item:



Which bulb(s) will be lit in the diagram?

a. A
b. A and C
c. B and C
d. A, B, and C

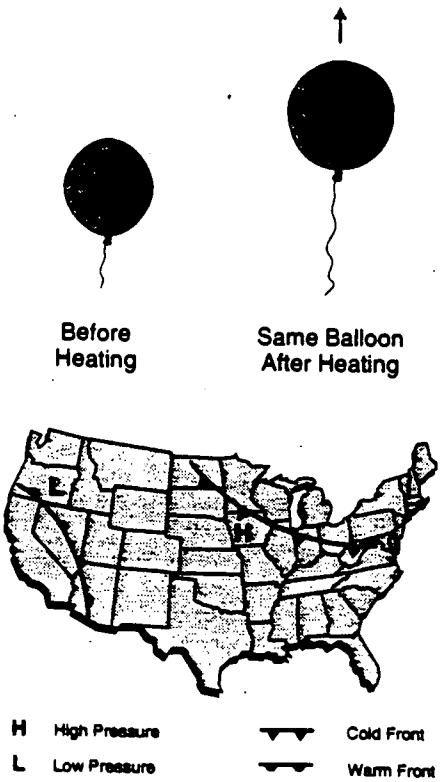
Answer: a

Short Answer: Grade 8

Earth's Dynamic Systems – Interactions Among Earth's Systems (Middle School)

Uneven heating and cooling of Earth's surface produce various air masses which differ in density, humidity, and temperature.

Item:



Use the balloon model to explain why air pressure changes when a weather front moves in and temperature increases.

Scoring Tool:

2 Cooler air is heavier and sinks; cooler air is associated with higher pressure. Warmer air expands, is lighter and rises; warmer air is associated with lower pressure.

1 Warm air rises and cool air sinks; doesn't explain why.

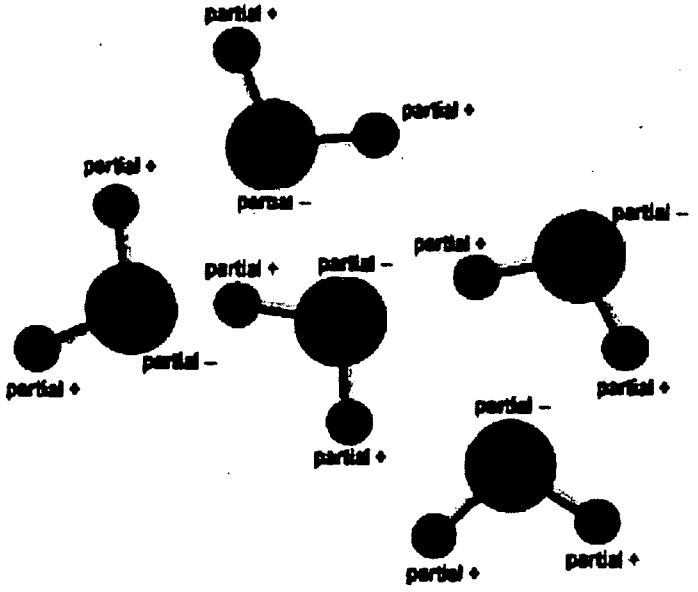
0 Inappropriate or no response.

Multiple Choice: Grade 11

Materials and Their Properties - Properties and Structure of Matter (High School)

Molecular properties and interactions depend on the kinds of atoms in the molecule, molecular shape and motion, and the electrical forces that exist between molecules.

Item:



Water is an extremely good solvent because it is a polar molecule. Which of these makes polar molecules good solvents?

a. They are repelled from other molecules by their magnetic forces.
b. They readily react with non-polar molecules.
c. They produce a strong electrical attraction to other molecules.
d. They create a stronger gravitational attraction than non-polar molecules.

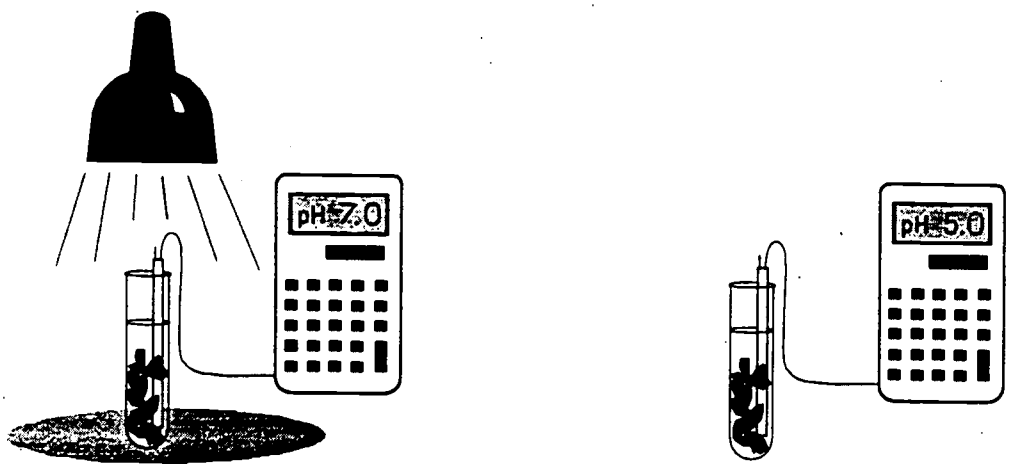
Answer: c

Short Answer: Grade 11

Life Processes - Matter and Energy Transformations (High School)

Photosynthesis and cellular respiration are complementary processes to the flow of energy and the cycling of matter in ecosystems.

Item:



12 hours
in the light

12 hours
with no light

A student put an elodea plant in a test tube for 24 hours. For 12 hours, the plant received light; for the next 12 hours, the plant was kept in the dark. The student measured the pH in both conditions. Explain why the water became acidic at nighttime. (You may use the formula for photosynthesis: $6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2$.)

Scoring Tool:

2 Cellular respiration is continuous and is source of CO_2. Photosynthesis absorbs CO_2 and slows at night (in dark condition). CO_2 in water forms carbonic acid, which lowers the pH.

1 Photosynthesis occurs and cellular respiration occurs. Or, water is less acidic (or CO_2 used) during photosynthesis but no reason provided. Or, water is more acidic when not conducting photosynthesis (or CO_2 accumulates), but no mention of respiration.

0 Inappropriate or no response.

B5. Social Studies, Grades 4, 6, 8, and 11

Multiple Choice Grade 4

History Standard #2 (Grade K-3 cluster)

Students will use artifacts and documents to gather information about the past.

Item:

Archaeologists digging in the remains of a Native American village have discovered the following artifacts:

- an animal bone
- a bone fish hook
- ashes from a fire
- wild grain seeds

Which artifact indicates that the people who lived in this area made and used tools?

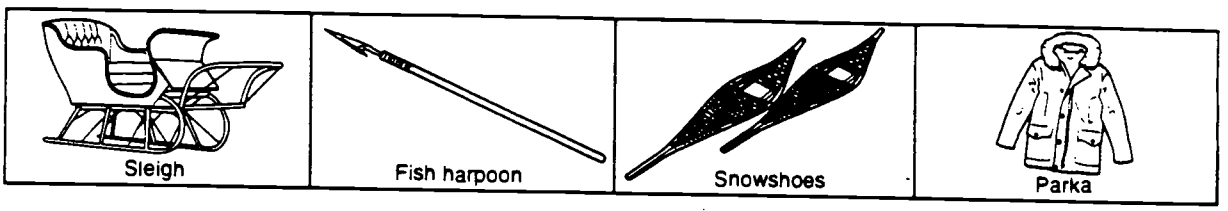
a. The bone fish hook
b. The animal bone
c. The ashes from a fire
d. The wild grain seeds

Answer: a

Geography Standard #4 (Grade K-3 cluster)

Students will use the concepts of place and region to explain simple patterns of connections between and among places across the country and the world.

Item:



Where might a person who owns these items most likely live? Explain your answer.

Scoring Tool:

This response gives evidence that the student will use the concept of place and region to explain simple patterns of connections.

2 This response gives evidence with a valid explanation and a relevant and accurate example.

1 This response gives evidence with a valid but vague explanation and an inaccurate, irrelevant, or no example.

0 Inaccurate response.

Civics Standard #3 (Grade 4-5b cluster)

Students will apply the protections guaranteed in the Bill of Rights to an analysis of everyday situations.

Item:

The Bill of Rights allows a government official to respond to this headline by—

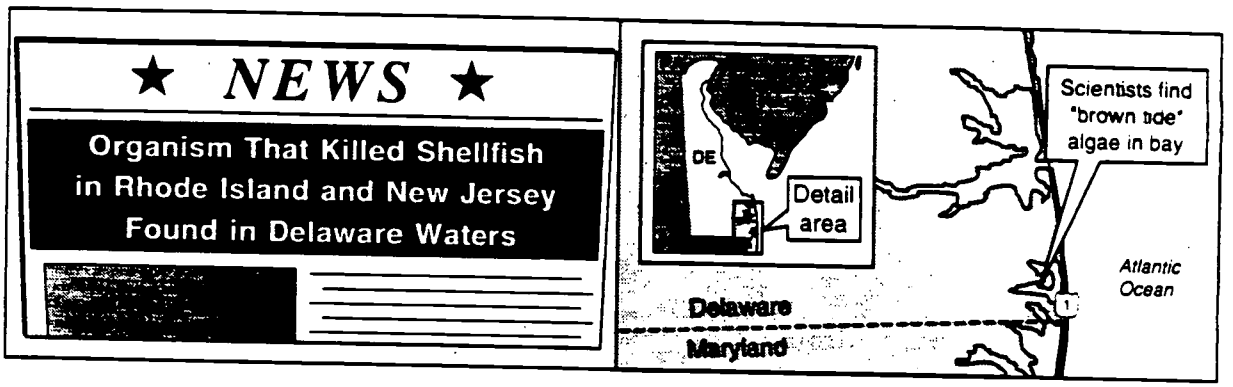
a. arresting the publisher of the newspaper
b. closing down the newspaper
c. demanding that the newspaper print a new headline
d. writing a letter of protest to the editor

Answer: d

Geography Standard #2 (Grade 4-5 cluster)

Students will apply a knowledge of topography, climate, soils, and vegetation of Delaware and the United States to understand how human society alters, and is affected by, the physical environment.

Item:



How might people have contributed to the presence of this organism in Delaware? Support your answer with geographic evidence.

Scoring Tool:

This response gives evidence of a knowledge of topography, soils, and vegetation of Delaware to understand how human society alters the physical environment.

2 This response gives a valid explanation with accurate and relevant geographic evidence.

1 This response gives a valid explanation with inaccurate, irrelevant, or no geographic evidence.

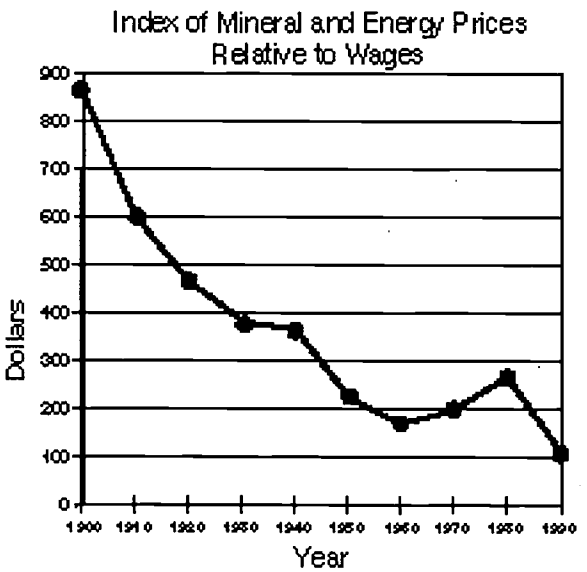
0 Inaccurate response.

Multiple Choice: Grade 8

Economics Standard #1 (Grade 6-8 cluster)

Students will analyze how changes in technology, costs, and demand interact in competitive markets to change the price of goods.

Item:



The general trend of price changes on the graph would ***not*** be caused by—

a. wage increases
b. lower extraction costs
c. development of cheap substitutes
d. depletion of natural resources

Answer: d

Short Answer Grade 8

History Standard #3 (Grade 6-8 cluster)

Students will compare different historians' descriptions of the same societies in order to examine how the choice of questions and use of sources may affect their conclusions.

Item:

Historian Perry Miller (1930's) - sees the Puritans as an example of the way in which religious ideas influence all other aspects of life.

Historian Daniel J. Boorstin (1950's) - sees the Puritans as a practical people, community builders who were not primarily preoccupied with religious ideas.

Why might these historians have such differing views of the same topic? Explain your answer.

Scoring Tool:

This response gives evidence of the student's ability to compare different historians' descriptions of the same society in order to examine how the choice of questions and use of sources may affect their conclusions.

2 This response gives evidence with a valid reason and a relevant explanation.

1 This response gives evidence with a valid but vague reason and a vague, irrelevant, or no explanation.

0 Inaccurate response.

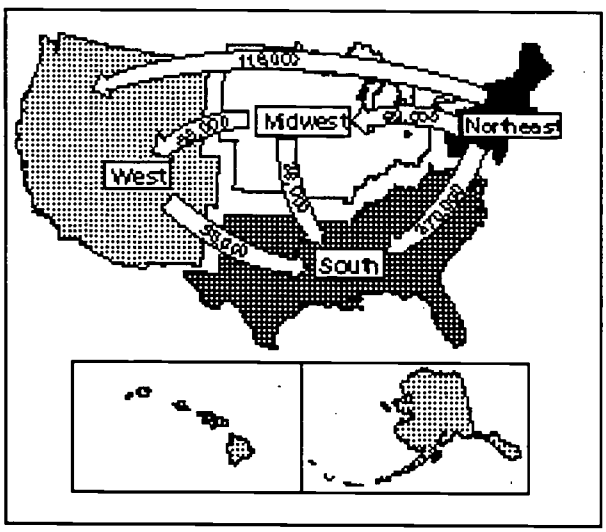
Multiple Choice: Grade 11

Geography Standard #1 (Grade 9-12 cluster)

Students will identify geographic patterns which emerge when collected data are mapped, and analyze mapped patterns through the application of diffusion.

Item:

Net Migration Flows Between Regions, 1990 – 1991



Which factor probably contributed ***most*** to the pattern of migration shown on the map?

a. More low-cost housing is available in the Northeast.
b. The number of jobs in the West is growing.
c. Large commercial farms in the West are breaking up.
d. Agricultural productivity in the South is increasing.

Answer: b

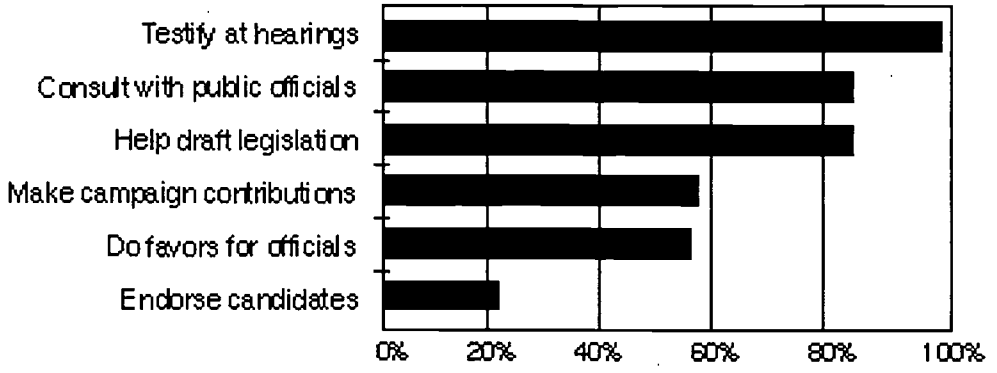
Short Answer: Grade 11

Civics Standard #4 (Grade 9-12b cluster)

Students will understand the process of working within a political party, a commission engaged in examining public policy, or a citizens' group.

Item:

This graph shows some tasks that congressional lobbyists perform.



How might lobbying be useful to public officials in fulfilling their duties? Support your answer with evidence.

Scoring Tool:

This response gives evidence of the student's ability to understand the process of working within a political party, a commission engaged in examining public policy, or a citizens' group.

2. This response gives evidence with a valid explanation and relevant supporting evidence.

1 This response gives evidence with a valid but vague explanation and irrelevant, little, or no evidence.

0 Inaccurate response.

APPENDIX C: SAMPLE DSTP-OR REPORTS

Following are samples of the various on-line reports from the 2000 administration of the DSTP. T**hey do not contain real data.** The reports included are:

C1: DSTP-OR Information Screen Including How to Get a Password

C2: DSTP-OR Screen of Available Reports by Year

C3: DSTP-OR Screen of Reports and Lists Available for the Selected Students as a Group

C4: DSTP-OR List of Test Scores of Selected Students in EXCEL Format

C5: DSTP-OR Instructional Needs Reports in EXCEL Format

C6: DSTP-OR Summary of Test Scores of Selected Students

C7: Table of Percentile Ranks Corresponding to National Curve Equivalent Ranges

C1: DSTP-OR Information Screen Including How to Get a Password

DELAWARE
STUDENT TESTING PROGRAM
ONLINE REPORTS
DELAWARE DEPARTMENT OF EDUCATION

To enter DSTP-OR...
- you must have MS Internet Explorer 4 **or** higher or Netscape Navigator 3 or higher as your browser,
- cookies must be enabled,
- and if you wish to access individual student testing information, you must have a valid username and password.

Back to access screen • **How to get a password** • **Browsers**
Cookies • **Troubleshooting** • **Contacts**
DSTP Home • DOE Home

Welcome to DSTP-OR, the Delaware Student Testing Program Online Reports. These reports are designed to provide meaningful, helpful, accurate, and timely feedback to educators and the public in order to promote the highest quality education for every Delaware student. DSTP-OR has a publicly-accessible section for finding test scores and performance level data by school, district, or state using a number of demographic factors. Furthermore, there is a password-protected section for authorized educators to find individual student and group DSTP information and scores.

How to get a password
A DSTP-OR Access Request Form is available for those educators wishing to use the password-protected Online Reports. The form must be signed by the applicant and by the principal (for building-level access) or the superintendent (for district-level access).

Browsers
In order to use DSTP-OR and all of its features you will need **Microsoft Internet Explorer 4 or higher.** Others may work, but if you contact us for help, we can assist you better if you the listed browsers.

Update Microsoft Internet Explorer

Cookies
In order to use DSTP-OR you must allow the use of cookies. Cookies are strings of text placed on your computer by a web server for a variety of purposes (visit Cookie Central for more detail). DSTP-OR uses cookies to distinguish your query session from other users' sessions and for security purposes.

C2: DSTP-OR Screen of Available Reports by Year

Delaware Department of Education

Delaware Student Testing Program Online Reports

DSTP-OR Home | Group Reports | IIP | INR | Logoff | Codes

Available Reports:

- **Reports for a Group of Selected Students** (For registered school administrators only)
  Click the following links to get score listings, group summaries and group "Instructional Needs Reports"
  - DSTP in Spring 2000
  - DSTP in Spring 1999
  - DSTP in Spring 1998
- Individual Improvement Plan (For registered teachers and school administrators only)
  Create, update or look up a student's Individual Improvement Plan
- **School or District Instructional Needs Reports** (For registered users only)
  - DSTP in Spring 2000
  - DSTP in Spring 1999
  - DSTP in Spring 1998
- State, District and School Summary (For public access)
  DSTP 2000 summaries are here along with 1998 and 1999 summaries.

Logout Change Your DSTP-OR Password About DSTP

DSTP-OR Home | Group Reports | IIP | INR | Logoff | Codes

Send comments to: Robin R. Taylor, M.Ed. Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

 Created on Friday, January 15, 1999, and last modified on Thursday, May 25, 2000
by Qi "Tommy" Tao, TMD DOE

C3: DSTP-OR Screen of Reports and Lists Available for the Selected Students as a Group

DSTP-OR (DELaware Student Testing Program Online Reports)

DSTP-OR Home | Group Reports | IIP | INR | Logoff | Codes

Student selection is completed

13 students' Spring 2000 DSTP records are selected.

Reports and lists available for the selected students as a group:

- Score Listings:
  - Reading Scores Listing **with** or **without** demographic information
  - Math Scores Listing **with** or **without** demographic information
  - Writing Scores Listing **with** or **without** demographic information
  - Performance Levels Listing **with** or **without** demographic information
  - All Scores Listing **with** or **without** demographic information

- Summary Reports:
  - **For Entire Group**
  - **Disaggregated**
    - **By Race**
    - **By Gender**
    - **By Special-Ed**
    - **By LEP**
    - **By Title 1**

- Instructional Needs Reports:
  - **For Entire Group**
  - **Disaggregated**
    - **By Race**
    - **By Gender**
    - **By Special-Ed**
    - **By LEP**
    - **By Title 1**

Get a New Group **Modify Search Condition** **Upload ID File**

DSTP-OR Home | Group Reports | IIP | INR | Logoff | Codes

Send comments to: Robin R. Taylor, M.Ed, Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

C4: DSTP-OR List of Test Scores of Selected Students in EXCEL Format

Spring 2000: List of Reading Scores of Selected Students

ID	Student Name	Reading Performance Level	Reading Scale Score	Reading Percentile Rank	Reading NCE Score	IIP	District Tested	School Tested
1	AA	3	482	73	62.9		11	99
2	BB	3	467	27	37.1		11	99
3	CC	3	495	78	66.3		11	99
4	DD	3	491	73	62.9		11	99
5	EE	2	431	23	34.4		11	99
6	FF	3	495	43	46.3		11	99
7	GG	1	416	13	26.3		11	99
8	HH	1	424	20	32.3		11	99
9	II	3	467	35	41.9		11	99
10	JJ	3	488	43	46.3		11	99
11	KK	3	495	49	49.5		11	99
12	LL	3	473	73	62.9		11	99
13	MM	2	431	13	26.3		11	99
14	NN	3	465	30	39		11	99
15	OO	5	543	67	59.3		11	99
16	PP	1	419	20	32.3		11	99
17	QQ	5	532	84	70.9		11	99
18	RR	3	459	30	39		11	99
19	SS	5	556	99	99		11	99
20	TT	2	444	38	43.6		11	99
21	UU	3	502	78	66.3		11	99
22	VV	3	495	61	55.9		11	99

C5: DSTP-OR Instructional Needs Reports in EXCEL Format

Spring 2000 Instructional Needs Report for Selected School

District	School	Grade	Group	Content	N Active	% Active	Indicator
AA	BB	10	All Students	Reading	233	79.25	Providing enough details from the text to answer open-ended questions.
					68	23.13	Reading more carefully to retell or restate information from the text.
					134	45.58	Using strategies to understand the text.
					132	44.9	Understanding the central ideas in a text.
					159	54.08	Using information to make interpretations.
					106	36.05	Drawing conclusions and using critical thinking to connect and synthesize information within and across text, ideas, and concepts.
					228	77.55	Understanding the effects of author's techniques and decisions.
					214	72.79	Using text to formulate, express and support opinions.
					108	36.73	Making, supporting and extending inferences about contents, events, characters, setting, theme, and style.
					7	2.381	Continuing use of good reading strategies. Congratulations!
				Math	160	55.56	Using mathematical operations, including those involving exponents, roots, and matrices with understanding.
					196	68.06	Finding the area of regions or volumes of space shapes.
					191	66.32	Using algebra to describe and analyze situations.
					192	66.67	Constructing and interpreting graphs.
					149	51.74	Solving equations and inequalities.
					230	79.86	Analyzing and applying properties of geometric figures.
					141	48.96	Coordinate geometry.
					142	49.31	Applying right triangle relationships.
					178	61.81	Determining the probability of events.

	131	45.49	Analyzing data and graphs.
	223	77.43	Using mathematical reasoning to solve multi-step problems.
	177	61.46	Communicating mathematical arguments.
Writing	90	31.91	Organizing the writing around a single topic or central idea
	90	31.91	Writing in complete sentences with a variety of length and structure
	248	87.94	Working to avoid errors in conventions of English usage, grammar, spelling, and punctuation and interfere with understanding
	90	31.91	Doing more than restating the prompt
	158	56.03	Organizing the writing around a single topic with an introduction, closing, and some transitions
	158	56.03	Working to avoid errors in conventions of English usage, grammar, spelling, and punctuation that interfere with understanding
	158	56.03	Supporting the ideas with more specific details
	33	11.7	Doing more than making generalities regarding the prompt
	33	11.7	Using an effective introduction and closing
	33	11.7	Writing in a consistent style with precise, vivid word choice
	33	11.7	Writing with a clear, logical progression of ideas using smooth transitions
	0	0	Including relevant details that are fully elaborated
	0	0	Continuing to write using distinctive voice and style
	0	0	Showing an exceptional awareness of readers' needs

C6: DSTP-OR Summary of Test Scores of Selected Students

Spring 2000: Summary of Test Scores of Selected Students

School:
District:
Group:

Other Lists and Reports

Grade	Content	Group	Summary Statistics			Percent at Each Performance Level				
			N Count	Mean	St Dev	5	4	3	2	1
8	Reading Scale Score	Selected Students	25	514.96	32.91	0	4	72	8	16
		School	367	518.01	39.58	1.63	8.45	65.67	10.08	14.17
		District	367	518.01	39.58	1.63	8.45	65.67	10.08	14.17
		State	8088	512.9	38.82	1.99	6.95	58.48	16.39	16.18
	Reading Percentile Rank	Selected Students	25	64						
		School	367	67						
		District	367	67						
		State	8088	60						
	Math Scale Score	Selected Students	25	484.44	25.65	0	4	28	44	24
		School	365	491.19	37.28	5.75	7.67	34.52	28.49	23.56
		District	365	491.19	37.28	5.75	7.67	34.52	28.49	23.56
		State	8065	487.33	40.52	7.41	6.32	27.48	25.93	32.86
	Math Percentile Rank	Selected Students	25	36						
		School	364	52						
		District	364	52						
		State	8067	54						
	Writing Raw Score	Selected Students	24	7.13	1.26	0	4.2	16.7	79.2	0
		School	350	7.5	1.3	0	0.57	54.86	37.43	7.14
		District	350	7.5	1.3	0	0.57	54.86	37.43	7.14
		State	7685	7.39	1.46	0.1	1.61	49.24	37.28	11.76

Bar Chart of Reading and Math Scale Scores
Bar Chart of Writing Raw Scores
Bar Chart of Reading and Math Percentile Rank Scores
Download spreadsheet format

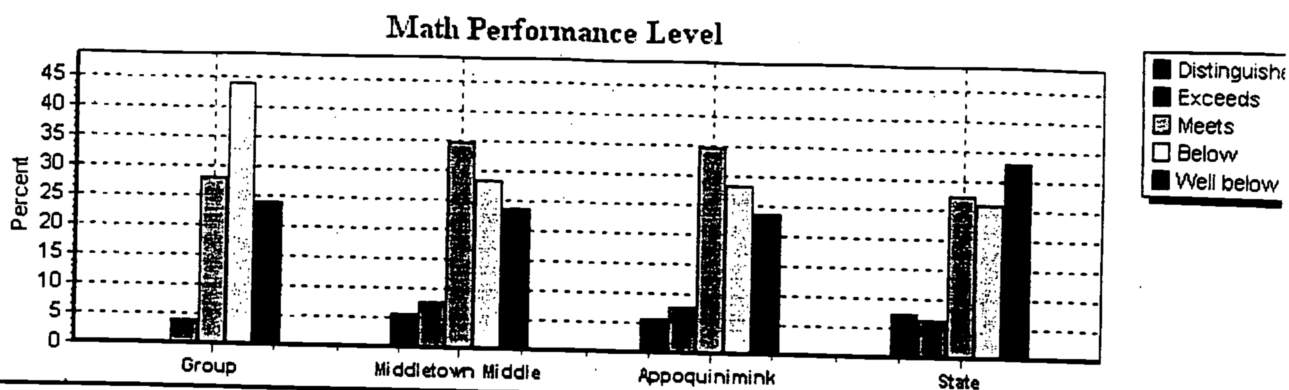
Bar Chart of Reading Performance Levels
Bar Chart of Math Performance Levels
Bar Chart of Writing Performance Levels

Other Lists and Reports

DSTP-OR (DELaware Student Testing Program: Online Reports)

DSTP-OR Home | Group Reports

Bar Chart for Spring 2000 DSTP: Grade 8



Previous Page

DSTP-OR Home | Group Reports

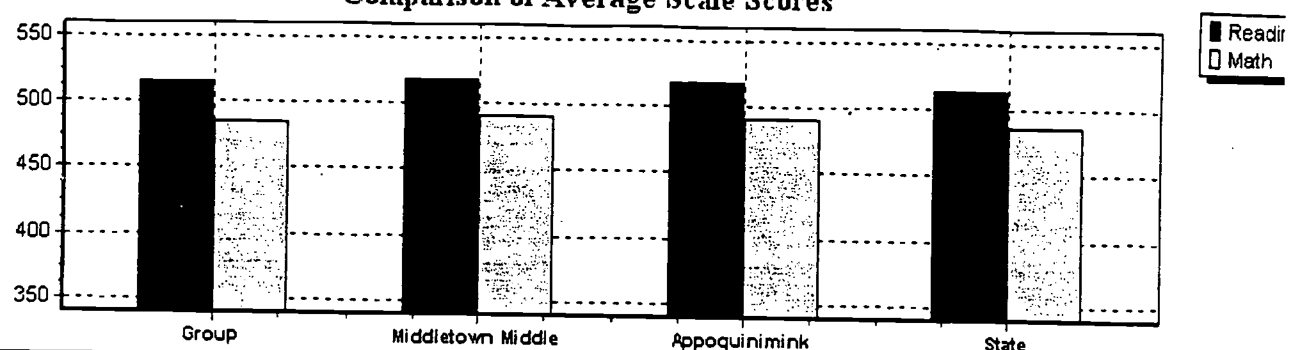
Send comments to: Robin R. Taylor, M.Ed, Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

Delaware Department of Education

DSTP-OR (DELaware Student Testing Program Online Reports)

DSTP-OR Home | Group Reports | Codes

Bar Chart for Spring 2000 DSTP: Grade 8

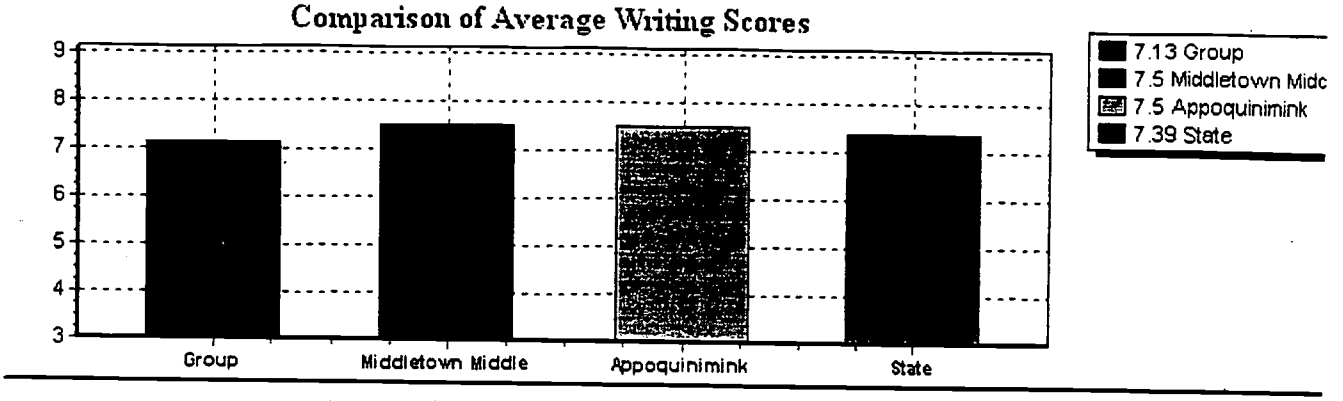


Previous Page

DSTP-OR Home | Group Reports

Send comments to: Robin R. Taylor, M.Ed, Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

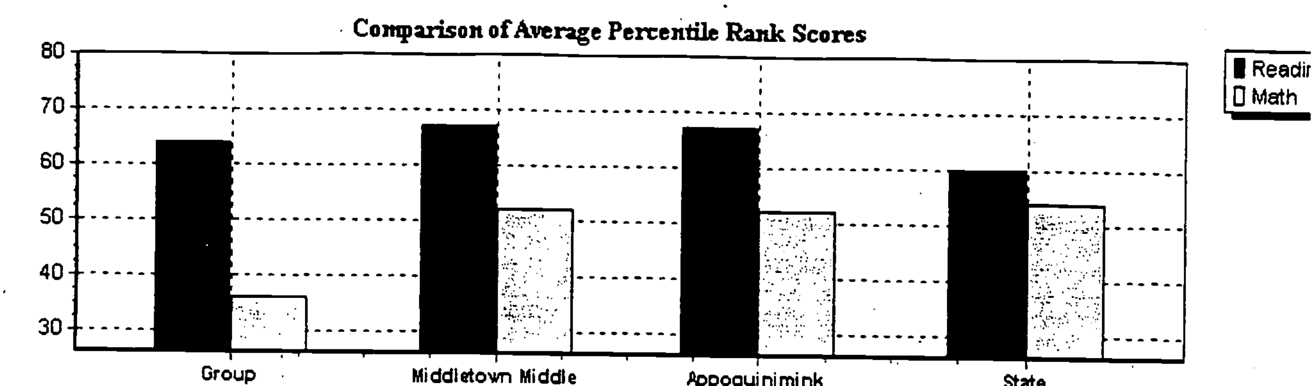
Bar Chart for Spring 2000 DSTP: Grade 8



Previous Page

Send comments to: Robin R. Taylor, M.Ed. Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

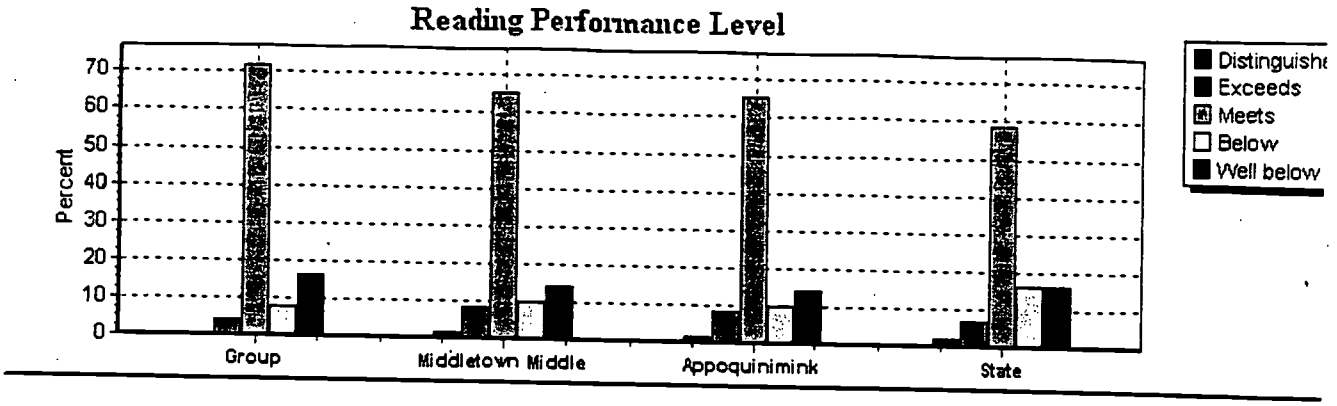
Bar Chart for Spring 2000 DSTP: Grade 8



Previous Page

Send comments to: Robin R. Taylor, M.Ed, Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

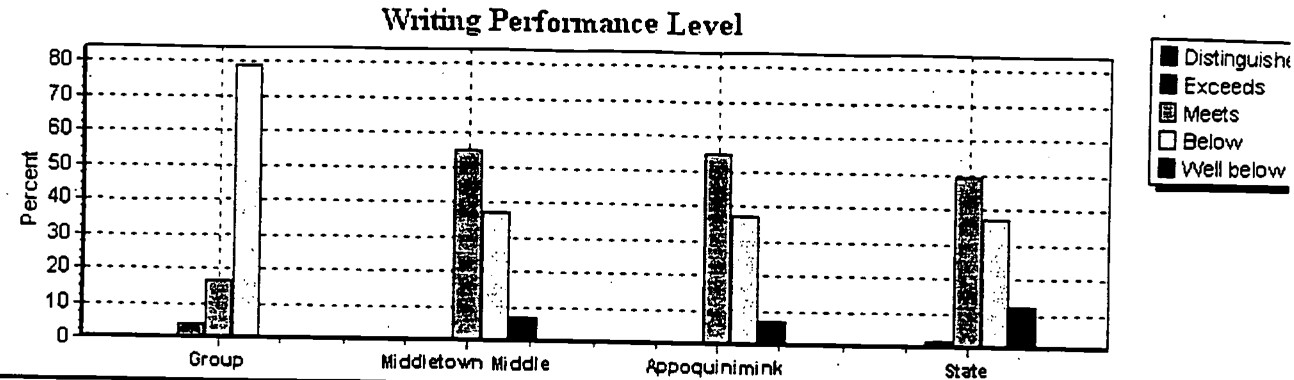
Bar Chart for Spring 2000 DSTP: Grade 8



Previous Page

Send comments to: Robin R. Taylor, M.Ed, Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

Bar Chart for Spring 2000 DSTP: Grade 8



Previous Page

Send comments to: Robin R. Taylor, M.Ed, Director of Assessments & Analysis Group, DOE, rotaylor@state.de.us
Contact Jeffery Fleming for DSTP related questions and user registration issues

C7: Table of Percentile Ranks Corresponding to National Curve Equivalent Ranges

Caution! Read below before working with percentile ranks!

If you would like to download the SAT9 data for additional analysis for a group of students, do not simply average the individual percentile ranks for the group. You must use the group norm instead of the individual norm because of the statistical characteristics of test scores. Following are the steps to obtain the group's percentile rank. If you have any questions, please contact Dr. Liru Zhang at (302) 739-2768 or lzhang@state.de.us.

1. Get each student's NCE score
2. Calculate the mean (or the average) of the NCE scores for the group (rounded to the nearest tenth)
3. Use the Table of Percentile Ranks Corresponding to National Curve Equivalent Ranges (below) to convert the mean NCE score to the percentile rank for the group.

Example: if the mean NCE score of a selected group of students is 48.5 which falls in the NCE range of 48.2 - 48.7, the corresponding percentile rank is 47

Table of Percentile Ranks Corresponding to National Curve Equivalent Ranges

Percentile Rank	NCE From	NCE To	Percentile Rank	NCE From	NCE To	Percentile Rank	NCE From	NCE To
1	1	4.2	34	41.1	41.6	67	59.1	59.6
2	4.3	8.7	35	41.7	42.2	68	59.7	60.1
3	8.8	11.8	36	42.3	42.7	69	60.2	60.7
4	11.9	14.3	37	42.8	43.3	70	60.8	61.3
5	14.4	16.3	38	43.4	43.8	71	61.4	62
6	16.4	18.1	39	43.9	44.4	72	62.1	62.6
7	18.2	19.7	40	44.5	44.9	73	62.7	63.2
8	19.8	21.1	41	45	45.5	74	63.3	63.9
9	21.2	22.4	42	45.6	46	75	64	64.5
10	22.5	23.6	43	46.1	46.5	76	64.6	65.2
11	23.7	24.7	44	46.6	47.1	77	65.3	65.9
12	24.8	25.8	45	47.2	47.6	78	66	66.6
13	25.9	26.8	46	47.7	48.1	79	66.7	67.3
14	26.9	27.7	47	48.2	48.7	80	67.4	68.1
15	27.8	28.6	48	48.8	49.2	81	68.2	68.9
16	28.7	29.5	49	49.3	49.7	82	69	69.7
17	29.6	30.3	50	49.8	50.3	83	69.8	70.5
18	30.4	31.1	51	50.4	50.8	84	70.6	71.4

19	31.2	31.9	52	50.9	51.3	85	71.5	72.3
20	32	32.5	53	51.4	51.3	86	72.4	73.2
21	32.7	33.4	54	51.9	52.4	87	73.3	74.2
22	33.5	34.1	55	52.5	52.9	88	74.3	75.3
23	34.2	34.8	56	53	53.4	89	75.4	76.4
24	34.9	35.5	57	53.5	54	90	76.5	77.6
25	35.6	36.1	58	54.1	54.5	91	77.7	78.9
26	36.2	36.8	59	54.6	55.1	92	79	80.3
27	36.9	37.4	60	55.2	55.6	93	80.4	81.9
28	37.5	38	61	55.7	56.2	94	82	83.6
29	38.1	38.6	62	56.3	56.7	95	83.7	85.7
30	38.7	39.3	63	56.8	57.3	96	85.8	88.1
31	39.4	39.8	64	57.4	57.8	97	88.2	91.2
32	39.9	40.4	65	57.9	58.4	98	91.3	95.6
33	40.5	41	66	58.5	59	99	95.7	99

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").